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1 P R O C E E D I N G S

08:57:11 2 THE COURT: Good morning, everyone.

08:57:11 3 MR. BENNETT: Good morning, Your Honor.

08:57:13 4 THE COURT: Is there anything we need to discuss
08:57:15 5 before we have the jury brought in?

08:57:17 6 MR. BENNETT: No, Your Honor.

08:57:18 7 MR. JOSHI: Your Honor, you had said that you
08:57:21 8 would come a little bit early to get the exhibits admitted
08:57:24 9 into evidence.

08:57:25 10 THE COURT: You're right. I did. And my
08:57:27 11 apologies. Let's do that really quickly.

08:57:27 12 MR. JOSHI: Okay.

08:57:30 13 THE COURT: And we'll -- then we'll get the jury
08:57:32 14 in.

08:57:33 15 MR. JOSHI: Sure.

08:57:33 16 THE COURT: You all be seated.

08:57:36 17 Mr. Joshi, you want to -- you can do it from there
08:57:38 18 if you want, or you can go to the podium.

08:57:41 19 MR. JOSHI: If everyone can hear me, I have the
08:57:44 20 microphone.

08:57:45 21 THE COURT: We can hear you.

08:57:47 22 MR. JOSHI: Finally -- the first day I figured out
08:57:47 23 how to use it, but --

08:57:47 24 THE COURT: That's okay. It's a little tricky.

08:57:51 25 MR. JOSHI: Yes. So for the defense, DX-87,

08:57:55 1 DX-88, DX-89, DX-90, DX-91, DX-139, and we also showed our
08:58:04 2 witness exhibits from the P-26 set, but I believe all of
08:58:10 3 those are admitted into evidence already.

08:58:13 4 THE COURT: Okay.

08:58:14 5 MR. BENNETT: That's correct.

08:58:15 6 THE COURT: All right. And the other exhibits
08:58:17 7 you're moving into evidence at this time?

08:58:20 8 MR. JOSHI: Yes, Your Honor.

08:58:21 9 THE COURT: Any objection to those?

08:58:23 10 MR. BENNETT: Unless otherwise indicated on the
08:58:25 11 record, no.

08:58:26 12 THE COURT: All right. Very well.

08:58:26 13 MR. JOSHI: Thank you.

08:58:28 14 THE COURT: They will be received.

08:58:28 15 MR. JOSHI: Thank you.

08:58:31 16 THE COURT: Plaintiffs have any they wish to move
08:58:35 17 in at this time?

08:58:35 18 MR. BENNETT: I think all of ours are in,
08:58:38 19 Your Honor. So I don't think we need to -- all the ones
08:58:42 20 that we've introduced are already in the record.

08:58:44 21 THE COURT: Good. All right. Let's have the jury
08:58:47 22 brought in.

08:58:48 23 COURT SECURITY OFFICER: All rise for the jury.

08:58:48 24 (Jury in.)

08:59:14 25 THE COURT: Please be seated.

08:59:19 1 Okay. At this time, Mr. Oliver, you may continue.

08:59:19 2 GLENN PERDUE, PLAINTIFF'S WITNESS,

08:59:19 3 PREVIOUSLY SWORN

08:59:26 4 CONTINUED DIRECT EXAMINATION

08:59:26 5 BY MR. OLIVER:

08:59:31 6 Q. Morning, Mr. Perdue. How are you?

08:59:33 7 A. Good morning, Mr. Oliver. Good.

08:59:35 8 Q. Did you revise your damages calculations -- did you
08:59:40 9 revise your damages calculations last night?

08:59:43 10 A. No, I did not.

08:59:44 11 Q. Okay. So let me -- when did you prepare your report in
08:59:48 12 this case, can you remind us?

08:59:51 13 A. September of 2020.

08:59:52 14 Q. And you received Mr. Reed's report about a month later
08:59:59 15 indicating that there were products in your report that
09:00:01 16 aren't accused of infringement, right?

09:00:03 17 A. Yes, and we discussed that yesterday, and I understand
09:00:06 18 it's an issue -- that there's a dispute about that, and I'm
09:00:09 19 not qualified to weigh on that dispute.

09:00:14 20 Q. Okay. What's the dispute on?

09:00:16 21 A. Well, it was represented to me that the products that
09:00:23 22 were in the ASUS spreadsheets were the accused products.
09:00:27 23 So that's the dispute.

09:00:30 24 Q. Who --

09:00:30 25 A. They're saying that it's a different set of accused

09:00:30 1 products.

09:00:30 2 Q. Did Mr. Rice tell you that?

09:00:31 3 A. No. That was represented to me by counsel.

09:00:35 4 Q. Which counsel?

09:00:36 5 A. Mr. Lee.

09:00:37 6 Q. Mr. Lee did?

09:00:38 7 Okay. Are you aware that this morning Lone Star
09:00:55 8 dismissed an additional 10 products from this case?

09:00:58 9 A. I was not, no, sir.

09:01:00 10 Q. This is not a new thing, this has been discussed for a
09:01:04 11 few days, but you didn't update your numbers to remove
09:01:04 12 those products that were dismissed?

09:01:08 13 A. I was not asked to, no, sir.

09:01:10 14 Q. Okay.

09:01:11 15 MR. OLIVER: May I have the Elmo, please?

09:01:11 16 BY MR. OLIVER:

09:01:47 17 Q. We have this -- we have this list here that
09:01:54 18 Dr. Ducharme showed the jury before you got here that lists
09:01:58 19 accused products, and we were discussing there's 135
09:02:03 20 products here, and I did note that there's at least one
09:02:09 21 that's duplicated there that's shown at 57 and 58, so 134
09:02:17 22 products.

09:02:17 23 And then we talked about 10 that were dismissed
09:02:21 24 this morning, right? So we're down to about 124 products.
09:02:26 25 I don't know if -- actually, some of those are already off

09:02:28 1 of this list, I guess.

09:02:31 2 And do you have any -- did you do anything to
09:02:41 3 confirm last night whether this list is correct?

09:02:44 4 A. No. I was not allowed to talk to counsel. There was
09:02:47 5 no contact at all.

09:02:48 6 Q. Okay. I would like to bring up the exhibit that you
09:02:58 7 used to do your calculations and manipulate it a little bit
09:03:04 8 on the screen and ask you if what I'm doing is a fair way
09:03:09 9 to analyze it. Is that okay with you?

09:03:16 10 A. We'll see in a minute, won't we?

09:03:18 11 Q. Okay.

09:03:20 12 MR. OLIVER: Can we have Plaintiff's Exhibit 94.

09:03:20 13 BY MR. OLIVER:

09:03:41 14 Q. Okay. Do you recognize this exhibit?

09:03:44 15 A. I do.

09:03:46 16 Q. And this is an Excel spreadsheet, right?

09:03:50 17 A. Yes.

09:03:51 18 Q. And you're familiar with operating Excel?

09:03:54 19 A. I am.

09:03:55 20 Q. Okay. What I'm going to do -- do you notice in the row
09:04:00 21 that says Model Name, there's a lot of blank lines?

09:04:04 22 A. Yes.

09:04:04 23 Q. What I'm going to do is I'm going to go to that row,
09:04:09 24 and I'm going to click on the little drop-down filter, go
09:04:14 25 down to the bottom, and I'm going to turn off links so it

09:04:25 1 only shows rows with data in them. Do you see that?

09:04:29 2 A. I do.

09:04:29 3 Q. And then that should give a complete listing of the
09:04:34 4 products that are in that Model Name row, shouldn't it?

09:04:37 5 A. That's what it looks like it did, but I can't remember
09:04:42 6 if those ones with the model name had the totals or what
09:04:46 7 they had in them and how they were populated.

09:04:49 8 Q. Okay. And for the next document I show you, I'm going
09:04:53 9 to represent to you I did that, I sorted it alphabetically,
09:05:02 10 and I put numbers next to it, and then I pasted it into
09:05:09 11 another document that we could display here, and what I
09:05:12 12 came up with --

09:05:17 13 MR. OLIVER: May we switch back to the Elmo?

09:05:17 14 BY MR. OLIVER:

09:05:24 15 Q. What I came up with was this list. It's kind of in the
09:05:28 16 format that Dr. Ducharme presented. Do you see it?

09:05:32 17 A. Yes, I see it.

09:05:33 18 Q. Do you recognize those product numbers, at least some
09:05:38 19 of them?

09:05:38 20 A. I remember the B1M and the B1MR from our discussion
09:05:44 21 yesterday.

09:05:45 22 Q. Okay. And so we talked about a few products that you
09:05:49 23 had added yesterday into your calculation that aren't
09:05:53 24 accused, right?

09:05:54 25 A. There's a dispute about that. I understand that what I

09:05:57 1 was presented are the accused products, and you're saying
09:06:01 2 that they aren't. And so I'm not in the position to weigh
09:06:07 3 in on that.

09:06:08 4 Q. Okay.

09:06:09 5 MR. OLIVER: There's a message on the TV that's
09:06:12 6 blocking part of the image.

09:06:15 7 THE COURT: Are you asking --

09:06:17 8 MR. OLIVER: I'm -- I don't know how to -- there's
09:06:18 9 something on the TV that's blocking part of the image. I
09:06:21 10 don't know what to do to show the full image.

09:06:26 11 THE COURT: We'll have Mr. Powers look at it.

09:06:49 12 MR. OLIVER: Thank you.

09:06:52 13 BY MR. OLIVER:

09:06:52 14 Q. So the list of accused products that Dr. Ducharme
09:06:56 15 showed us was about 134 products, right?

09:07:00 16 A. That's what I'm being -- what's being represented to
09:07:04 17 me.

09:07:04 18 Q. Okay. And you're seeing here about 135 products,
09:07:08 19 right?

09:07:08 20 A. Yes.

09:07:09 21 Q. But the problem is that's not the complete list.
09:07:16 22 There's another 135 products in the exhibit from you --
09:07:22 23 which you calculated damages, and another 50 products
09:07:30 24 beyond that, right?

09:07:32 25 A. I don't -- I don't know. I would have to go and look

09:07:35 1 into that further. I've got those counts somewhere in my
09:07:38 2 report.

09:07:39 3 Q. Okay. Is it okay -- if there's inaccuracies when
09:07:44 4 you're redirected by your counsel you'll be able to address
09:07:48 5 those, right?

09:07:48 6 A. Yes, I would suppose so.

09:07:51 7 Q. Okay. And so what I did -- I didn't have the chance to
09:07:53 8 make fancy graphics -- was I put together a list where I
09:07:58 9 went through and I checked and I marked off all the
09:08:02 10 unaccused products with red for which you included damages
09:08:06 11 in your report. Do you see that?

09:08:08 12 A. Unaccused. So the ones that are in lighter red than
09:08:15 13 darker red are --

09:08:16 14 Q. I think the lighter red is bleed-through because it's
09:08:20 15 two-sided, but I made a dark red mark on the non-accused
09:08:25 16 products?

09:08:25 17 A. Okay. So just the dark red are what you're saying are
09:08:30 18 non-accused?

09:08:30 19 Q. Right.

09:08:30 20 A. Okay. Gotcha.

09:08:33 21 Q. You can see that. And then if I go to the second page,
09:08:33 22 you can see that almost all of the products that you
09:08:36 23 calculated damages for are not accused, right?

09:08:38 24 A. Based upon your representation, that's correct.

09:08:41 25 Q. And on the final page, the same is true, right?

09:08:45 1 A. Yes.

09:08:45 2 Q. So 134 products or so, maybe a few less than that, are
09:08:54 3 accused of infringement. And you calculated damages for
09:09:01 4 320 products; is that right?

09:09:03 5 A. I'd have to look at my report to see what the product
09:09:07 6 count is.

09:09:20 7 The last -- I mean, the last product count that I
09:09:24 8 have for a full year is 149 monitors for 2018, and then in
09:09:35 9 the new spreadsheet, I wasn't able to do product counts
09:09:38 10 because of the way that they were presented.

09:09:40 11 So the last product count that I have in my report
09:09:43 12 for 2018 was 149 monitors.

09:09:46 13 Q. But you didn't even include 218 damages -- or you
09:09:53 14 didn't include 2018 numbers in your damages report because
09:09:56 15 damages aren't even claimed for 2018, right?

09:10:00 16 A. That's right. Damages start in 2019, but when I look
09:10:04 17 at the prior years: 2016, it was 130. 2017, it was 149.
09:10:09 18 2018, it was 149. So since the numbers are comparable and
09:10:14 19 they actually even go down, it would make sense that the
09:10:19 20 damage counts are consistent with that.

09:10:22 21 Q. Okay. But you included -- you included all the damages
09:10:24 22 for any products that are in that spreadsheet --

09:10:24 23 A. No, I told --

09:10:30 24 Q. -- that we showed in P-90 -- PX-94, right?

09:10:32 25 A. I told you what the product counts were for the prior

09:10:36 1 years, and we could maybe do a product count for those
09:10:39 2 subsequent years, but I would expect it to be in that same
09:10:42 3 range of 130 to 150, and that's in my report on this page
09:10:55 4 right here.

09:10:56 5 Q. And you were aware that in October, Mr. Reed pointed
09:11:00 6 out at least 40 significantly high sales products that you
09:11:04 7 included in your damages calculation that --

09:11:04 8 A. I recall Mr. Reed --

09:11:07 9 Q. -- were not accused?

09:11:08 10 A. -- pointing out certain products were more expensive
09:11:12 11 than others, yes, I do.

09:11:13 12 Q. And you -- and he also pointed out a number of higher
09:11:17 13 sellers, over 40, that you included in your damages
09:11:21 14 calculation that are not accused?

09:11:23 15 A. Well, again, that's a contention. I'm not qualified to
09:11:26 16 weigh in on that, but I do recall that in Mr. Reed's
09:11:29 17 report.

09:11:29 18 Q. Okay. So as you sit here, you cannot say which
09:11:33 19 products are accused, even though you calculated damages
09:11:37 20 for supposedly accused products?

09:11:40 21 A. I can give you a count. I can tell that in 2018, that
09:11:44 22 it was about 149 monitors. That's in my report.

09:11:47 23 Q. 2018, we just established that's not part of the
09:11:52 24 damages that are being claimed here, right?

09:11:55 25 A. And that's because product counts, I wasn't able to do

09:11:59 1 them. When I look back on all these product counts for all
09:12:03 2 these years that I have, the low amount is 129, the high
09:12:06 3 amount is 149. It makes sense that the subsequent years
09:12:09 4 would be 129 to 149 because the numbers are about the same.
09:12:12 5 Q. So you didn't provide product counts for 2019 and 2020
09:12:16 6 and 2021, did you?
09:12:18 7 A. Didn't have the data to be able to do that. The data
09:12:22 8 was presented differently in that second spreadsheet than
09:12:26 9 it was in the first spreadsheet, and it made that kind of
09:12:30 10 count problematic.
09:12:31 11 Q. Sir, how long did you have to prepare your report?
09:12:35 12 A. I don't know, a month or so.
09:12:37 13 Q. And the data problem you had was that some of those
09:12:40 14 rows were blank --
09:12:42 15 A. No --
09:12:43 16 Q. -- that we saw, right?
09:12:44 17 A. That wasn't the problem. I mean, you can see in my
09:12:47 18 report, I did product counts and they stopped when the new
09:12:51 19 data came in and there was something about the new data
09:12:55 20 that prevented me from being able to do the product counts
09:12:59 21 like I had done with the old data or I would have done it.
09:13:02 22 Q. So you don't even know what products the new data
09:13:05 23 relates to?
09:13:06 24 A. Yeah, it's in my report, and it's in that spreadsheet.
09:13:10 25 Q. So we just, in two minutes, pulled up the spreadsheet,

09:13:14 1 isolated the product numbers and counted them, and you have
09:13:17 2 a month and you were not able to do that for your report?

09:13:22 3 MR. LEE: Objection, Your Honor. Argumentative.

09:13:25 4 THE COURT: I agree. I'll sustain that.

09:13:28 5 Let's move along, Mr. Oliver.

09:13:31 6 MR. OLIVER: Okay.

09:13:31 7 BY MR. OLIVER:

09:13:32 8 Q. Sir, would it be fair to withdraw your damages opinion
09:13:35 9 right now, given that you don't know whether the products
09:13:38 10 you included in the damages number were accused of
09:13:41 11 infringement?

09:13:41 12 A. No. I think that's something for the jury to weigh.

09:13:44 13 Q. Okay. So the jury gets to go back and look through
09:13:49 14 that spreadsheet and try and eliminate all the non-accused
09:13:53 15 products and then replicate your calculations based on
09:13:56 16 that, sir?

09:13:57 17 MR. LEE: Objection, Your Honor. Argumentative.

09:14:00 18 THE COURT: Overruled.

09:14:08 19 A. So this is a point of contention. I was represented
09:14:10 20 that those were the accused products. You're telling me
09:14:13 21 they're not. I'm not qualified to weigh in on that.

09:14:16 22 BY MR. OLIVER:

09:14:17 23 Q. Okay. So just to be clear, when you did the report,
09:14:20 24 you included the products in the spreadsheet, correct?

09:14:23 25 A. Yes.

09:14:24 1 Q. And you did not know which products were accused and
09:14:30 2 which were not accused?

09:14:31 3 A. It was represented to me that all items in the
09:14:34 4 spreadsheet were accused.

09:14:35 5 Q. Okay. And we all know, sitting here today, that the
09:14:38 6 list of accused devices is less than 135 products, and you
09:14:44 7 still don't want to withdraw your opinion based on the 320
09:14:50 8 products you analyzed?

09:14:51 9 A. No. I think the jury gets to weigh that as a part of
09:14:56 10 their consideration if what you're contending is true.

09:14:59 11 Q. How many patent cases have you offered damages opinions
09:15:02 12 in?

09:15:03 13 A. About 20.

09:15:04 14 Q. And in those 20 cases, have you ever sought damages for
09:15:09 15 products that were not accused of infringement?

09:15:11 16 A. No.

09:15:12 17 Q. Not until this one?

09:15:14 18 A. Well, again, you're representing that to me, and that's
09:15:17 19 a point of dispute. So it's a representation. It's not
09:15:21 20 necessarily a fact.

09:15:22 21 Q. So would you agree that seeking damages for 320
09:15:27 22 products when only 135 products is a little more than a
09:15:33 23 dispute of fact?

09:15:35 24 A. If your contention is true, it should be based on the
09:15:40 25 amount of the accused products.

09:15:41 1 Q. And -- but you did not base your calculation on
09:15:46 2 these 135 accused devices?

09:15:47 3 A. I based on the accused products that were represented
09:15:50 4 to me. That's a point of contention and dispute. There's
09:15:54 5 a dispute over that, and I'm not qualified to weigh in on
09:16:00 6 that dispute.

09:16:03 7 Q. Sir, when you were talking yesterday about settlement
09:16:10 8 agreements, you mentioned that a settlement is compelled
09:16:14 9 and so you eliminated settlement licenses from your
09:16:19 10 calculations?

09:16:19 11 A. Yes.

09:16:19 12 Q. Did that include the settlements that Lone Star made
09:16:22 13 with other parties?

09:16:24 14 A. Yes, I gave those the same weight that I did the ASUS
09:16:29 15 settlement agreements.

09:16:29 16 Q. So when Lone Star sues a company, they're compelled to
09:16:34 17 settle it?

09:16:35 18 A. No. They can -- they can go to trial, but there's
09:16:38 19 still compulsion there if you go to litigation.

09:16:41 20 Q. And the Defendant, like ASUS, was compelled to settle?
09:16:45 21 Because I don't see an ASUS settlement agreement here.

09:16:48 22 A. That's what I just said. Going to litigation, there's
09:16:51 23 compulsion there. Whether to settle before or go the whole
09:16:54 24 way, there's compulsion in that whole situation.

09:16:56 25 Q. It's really a choice of the parties whether they want

09:17:00 1 to settle or not. It's not compelled, right?

09:17:03 2 A. Well, it's compelled by virtue of the threat of
09:17:07 3 litigation. That's where the compulsion comes from.

09:17:10 4 Q. And that's why Barco settled with Lone Star for
09:17:14 5 135,000?

09:17:15 6 A. I don't know why Barco settled.

09:17:18 7 Q. I thought you just said it was compelled?

09:17:21 8 A. I said there's compulsion. There's compulsion there,
09:17:23 9 but exactly why they settled, I don't know.

09:17:25 10 Q. Did you ever consider that Barco got some advantages
09:17:28 11 from the agreement by settling, rather than going to trial?

09:17:32 12 A. It was not relevant to my analysis, so I really didn't
09:17:35 13 give it much thought.

09:17:37 14 Q. Because Barco would have paid a lot of money to have a
09:17:41 15 room full of lawyers and experts sitting here for a week,
09:17:46 16 wouldn't they?

09:17:47 17 A. If they took it to trial, there would be expense
09:17:50 18 associated with it.

09:17:50 19 Q. More than 135,000, probably, right?

09:17:54 20 A. Probably so.

09:17:54 21 Q. And so actually the money that they paid was probably
09:17:57 22 less than they would have even paid to go to trial, right?

09:18:00 23 A. Probably so.

09:18:01 24 Q. So they weren't necessarily valuing the patent at
09:18:05 25 135,000. They were saving the 135,000 they would have paid

09:18:09 1 their cadre of lawyers and experts and witnesses to be
09:18:13 2 here, right?

09:18:13 3 A. And that's one of the reasons why we don't consider
09:18:16 4 those settlements as good economic evidence.

09:18:19 5 Q. But you considered a settlement with Acer in your
09:18:28 6 analysis, right?

09:18:29 7 A. No, I didn't give it any weight. I said that earlier.
09:18:33 8 I did not consider that. I considered it, but it didn't
09:18:37 9 affect my royalty rate calculation.

09:18:38 10 Q. Didn't you give some testimony about Acer having an
09:18:50 11 implied royalty rate of \$0.61 per unit?

09:18:52 12 A. Yeah. And in my direct, I said that I did that
09:18:56 13 calculation but I didn't give it any weight because I had
09:19:00 14 the data.

09:19:01 15 Q. So the jury should disregard the \$0.61 per unit that
09:19:05 16 you said?

09:19:06 17 A. I disregarded all those licenses as it related to the
09:19:09 18 entire royalty rate.

09:19:10 19 Q. Okay. Do you recall showing this slide to the jury?

09:19:40 20 A. I do.

09:19:41 21 Q. Now, this slide, where I'm marking it, shows royalty
09:19:54 22 rates between 2 percent and 50 percent, right?

09:19:57 23 A. That's correct.

09:20:00 24 Q. But you actually excluded the 50 percent rate from your
09:20:06 25 calculations, right?

09:20:07 1 A. Yes.

09:20:07 2 Q. Okay. And so why is it on the chart if it's excluded?

09:20:13 3 A. Because what I'm representing here is the range, and I
09:20:16 4 say that nine selected agreements before adjustment for
09:20:22 5 exclusivity are 2 to 15 percent. I explained it under the
09:20:27 6 green bar.

09:20:27 7 Q. But what about the 0.5 percent licenses in that group?

09:20:32 8 A. That was Chimei Innolux, and that was an Eastern
09:20:35 9 District of Texas case, so I set it aside like I did the
09:20:38 10 other agreements that were obtained under compulsion.

09:20:42 11 Q. So that case was here in the Eastern District of Texas,
09:20:44 12 but it's not relevant to what a jury in the Eastern
09:20:47 13 District of Texas should consider?

09:20:47 14 A. That's not the reason that it's not relevant. The
09:20:51 15 reason that it's bad economic evidence is for the same
09:20:54 16 reason that the ASUS licenses and the Lone Star licenses
09:20:58 17 shouldn't be considered. It's because of the issue of
09:21:00 18 compulsion.

09:21:00 19 Q. So I kind of -- I've taken one of your other documents,
09:21:07 20 and I'm kind of folding it up to highlight the key parts.

09:21:12 21 Do you recognize the list of licenses there? It's
09:21:23 22 a little tough to see, right?

09:21:24 23 A. No, I see it.

09:21:26 24 Q. What I've done is I have folded it to hide the top part
09:21:31 25 so we can see the royalty rates next to the actual rates.

09:21:34 1 A. Yes.

09:21:34 2 Q. And this group of licenses here is what you based
09:21:38 3 this 2 to 15 percent and the 50 percent on, right?

09:21:46 4 A. Yes, the 2 percent -- the 2 percent to the 15 percent
09:21:52 5 is the middle range. Is that what you said?

09:21:55 6 Q. I was just -- I just wanted to confirm that this data
09:21:58 7 was where you got that green line from.

09:22:01 8 A. Yes, it is. And I considered all of the non-litigation
09:22:06 9 licenses in that data spread.

09:22:08 10 Q. Okay. So you excluded this one?

09:22:15 11 A. Well, that's another --

09:22:16 12 Q. 50 percent, right?

09:22:18 13 A. That's another layer of exclusion. I considered all
09:22:22 14 the non-litigation licenses in that 2 to 50 spread.

09:22:25 15 Q. So you excluded the 50 percent, right?

09:22:32 16 A. In the next round, I excluded it, and that's why I had
09:22:37 17 the 2 to 15 on the green bar.

09:22:40 18 Q. Okay. And then you have one there that's 0.5 percent,
09:22:45 19 right?

09:22:45 20 A. Excluded because of litigation.

09:22:46 21 Q. But not shown on the green bar?

09:22:48 22 A. Because I excluded it because of the litigation issue.

09:22:54 23 Q. Okay. What about this one? I don't see a 0.5 on the
09:23:00 24 bar.

09:23:00 25 A. You're right. That should be on there.

09:23:02 1 Q. Okay. And then zoom back out and show your bar of

09:23:05 2 license rates. It goes up to 15 percent, right?

09:23:10 3 A. For the selecteds, yes.

09:23:11 4 Q. But then you talk about nine of them being between 2

09:23:16 5 and 15 percent, right?

09:23:17 6 A. Yes -- yes.

09:23:20 7 Q. And -- but if we look at the data, what we see here is

09:23:29 8 there's one at 15 percent, right?

09:23:31 9 A. Yes.

09:23:37 10 Q. And then the other eight of those licenses are

09:23:40 11 5 percent or less, right?

09:23:47 12 A. Yes.

09:23:48 13 Q. Your key set of data was really somewhere

09:23:52 14 between 2 percent and 5 percent and not between 2 percent

09:23:55 15 and 50 percent, right?

09:23:57 16 A. Well, it depends on how you slice the data. The other

09:24:01 17 thing we could do here is look at these non-exclusive

09:24:08 18 licenses and say, okay, we want a non-exclusive license.

09:24:10 19 There's three of them there. The median is 5 percent. I

09:24:14 20 could have done that, too, but I didn't.

09:24:16 21 Q. That's part of the magic you did when you came up with

09:24:20 22 these numbers, right?

09:24:21 23 A. No, the magic is the Georgia-Pacific hypothetical

09:24:25 24 negotiation.

09:24:25 25 Q. That's -- this is not part of it?

09:24:28 1 A. It is.

09:24:29 2 Q. This is part of the magic?

09:24:30 3 A. I don't do the magic. Georgia-Pacific is the magic.

09:24:33 4 Q. The Georgia-Pacific case had nothing to do with either
09:24:41 5 of these parties?

09:24:42 6 A. Oh, yeah, it does. These are the --

09:24:43 7 Q. Who were the parties in the Georgia-Pacific lawsuit?

09:24:46 8 A. Pardon me?

09:24:48 9 Q. The parties -- the parties that went to court in the
09:24:53 10 Georgia-Pacific lawsuit where you got the standard from?

09:24:56 11 A. It was Georgia-Pacific and some -- and a plywood
09:24:59 12 company.

09:24:59 13 Q. But neither of the companies here today, right?

09:25:01 14 A. Oh, no.

09:25:02 15 Q. Then you take Georgia-Pacific and apply it to this
09:25:05 16 case?

09:25:05 17 A. Yes.

09:25:06 18 Q. And that's where the magic happens?

09:25:08 19 A. In the hypothetical negotiation. That was what I was
09:25:10 20 referencing as "the magic" yesterday.

09:25:12 21 Q. Okay. In your presentation with Mr. Lee, you asked for
09:25:39 22 a lump-sum royalty or a lump-sum payment, right?

09:25:46 23 A. Yes, we discussed a lump-sum payment.

09:25:50 24 Q. And we've talked about the report you did in this case,
09:25:53 25 right?

09:25:53 1 A. Yes.

09:25:53 2 Q. Did you ever talk about a lump sum in the report?

09:25:56 3 A. I talked about settlement agreements that occurred on a
09:25:59 4 lump-sum basis, I believe.

09:26:01 5 Q. But you didn't talk about Lone Star being entitled to a
09:26:04 6 lump sum, right?

09:26:05 7 A. No.

09:26:06 8 Q. Okay.

09:26:06 9 A. I presented it as --

09:26:08 10 Q. You've answered my question, sir.

09:26:13 11 A. Okay.

09:26:13 12 Q. What was the date that that lump sum payment would be
09:26:18 13 made?

09:26:19 14 A. Well, in theory, sometime at the end of trial.

09:26:23 15 Q. So when you -- approximately 2021 is the date of the
09:26:28 16 lump sum payment?

09:26:29 17 A. Yes.

09:26:36 18 MR. OLIVER: I pass the witness, Your Honor.

09:26:37 19 THE COURT: Redirect.

09:26:45 20 REDIRECT EXAMINATION

09:26:52 21 BY MR. LEE:

09:27:09 22 Q. Mr. Perdue, today and yesterday, Mr. Oliver kept on
09:27:11 23 asking you about performing magic on the numbers. Did you
09:27:16 24 perform magic on numbers?

09:27:18 25 A. I did not.

09:27:19 1 Q. Now, moments ago, he brought up P-94?

09:27:22 2 A. Yes.

09:27:22 3 Q. And asked you questions about that?

09:27:24 4 A. Yes.

09:27:26 5 MR. LEE: I'd like to bring up that exhibit, P-94.

09:27:32 6 THE WITNESS: Okay.

09:27:40 7 BY MR. LEE:

09:27:42 8 Q. Can you remind us who provided the data for this
09:27:46 9 document?

09:27:46 10 A. ACI. That's ASUS's U.S. subsidiary.

09:27:57 11 Q. Now, let's -- you know -- and Columns A and B provide
09:28:00 12 what type of information?

09:28:01 13 A. Column A is a product type, I guess you might say, and
09:28:06 14 then Product B is a model.

09:28:07 15 Q. Okay. If we were to go down to the model name and
09:28:07 16 click on -- for example, let's just -- like if you scroll
09:28:19 17 down, you select "all," and just select models beginning
09:28:25 18 with PA.

09:28:26 19 A. Okay.

09:28:27 20 Q. We're going to limit the number of data on the screen.

09:28:31 21 What does this show you right here in terms of the
09:28:34 22 spreadsheet at this point?

09:28:36 23 A. Well, it shows us about one, two, three, four -- shows
09:28:45 24 us about 15 different items, some of which have data and
09:28:50 25 some of which don't. Only four of those items have data.

09:28:53 1 Q. And so that's what you mean by not being able to come
09:28:57 2 up with a product count earlier when Mr. Oliver was asking
09:29:01 3 those questions?

09:29:02 4 A. Yeah. So when I was doing the product counts in my --
09:29:05 5 in my work, I was looking for products that had active
09:29:09 6 sales activity for that particular year, and in the prior
09:29:13 7 years, like I said, it was basically 120 to 150 products in
09:29:17 8 any given year that were actively being sold.

09:29:20 9 Q. Now, let's make it a little bit -- even easier.

09:29:26 10 MR. LEE: Let's hide the Column C, which is the
09:29:29 11 customer name, all the way through to the columns that show
09:29:33 12 the 2018 data.

09:29:35 13 BY MR. LEE:

09:29:43 14 Q. Now, what's shown on the screen right now for the --
09:29:48 15 for these products?

09:29:48 16 A. Yeah. So what you see there is for 2019 and 2020,
09:29:53 17 one, two, three, four, five products had activity of those
09:29:58 18 15 or so that would have had prior activity but didn't have
09:30:01 19 activity in 2019 and 2020.

09:30:04 20 Q. Now, if I wanted to -- how would you calculate the
09:30:10 21 revenue for 2019?

09:30:14 22 A. You would take these five products that have the
09:30:17 23 activity, and you would sum up that Net Revenue column,
09:30:22 24 which totals to 600 -- looks like 657,000 in the bottom
09:30:30 25 right.

09:30:32 1 Q. Now, that would be the 2019 Net Revenue number?

09:30:37 2 A. For the -- for the products with the prefix PA.

09:30:41 3 Q. Now, did you -- when you were calculating the damages
09:30:47 4 number, did you use the full 2019 number?

09:30:50 5 A. No. It was prorated based upon the notice date.

09:30:56 6 Q. And the notice date was February 20, 2019, right?

09:31:03 7 A. Initially, yes, initially.

09:31:06 8 Q. How -- so how would you -- walk us through how you
09:31:10 9 would prorate the 2019 Net Revenue numbers based on a
09:31:15 10 February 20th notice date.

09:31:16 11 A. You just did the pro rata math. You get Excel to tell
09:31:20 12 you how many days are from January 1 to February 20, and
09:31:24 13 you just look at the remaining days of the year, and you
09:31:28 14 subtract the dates, and it tells you how many days are
09:31:31 15 left. And then you take that over 365, and you multiply
09:31:34 16 that times the numbers.

09:31:36 17 Q. Now, if the date was June 20th, for example, 2019, how
09:31:42 18 would you do the pro rata data for the 2019-calendar year?

09:31:45 19 A. Yep, same thing. You would basically see how many days
09:31:48 20 that represents, and then get the pro rata ratio for the
09:31:51 21 remaining days of the year over 365 and multiply that times
09:31:55 22 the metrics that you care about.

09:31:58 23 Q. Now, in 2020, you -- for -- the sales data goes up
09:32:02 24 through March 13, 2020; is that correct?

09:32:11 25 A. The sales -- yes, it was to -- it was about -- it was

09:32:13 1 mid-March. March -- because I remember two and a half
09:32:16 2 months of 2020.

09:32:17 3 Q. And when you look at the bottom of that tab screen for
09:32:20 4 the worksheet, what does it say?

09:32:29 5 A. Yeah, it says 03/13, 03/20, so that's the date range,
09:32:34 6 and then it's up at the period up at the top, too. It
09:32:37 7 says, Period: March 13 - March 20th at the top.

09:32:41 8 Q. Did you review any ASUS sales data pertaining to the
09:32:45 9 sales of accused products after March 13, 2020?

09:32:48 10 A. No.

09:32:50 11 Q. Do you know why that was the case?

09:32:53 12 A. It wasn't provided.

09:32:55 13 Q. Provided by who?

09:32:56 14 A. ASUS.

09:32:56 15 Q. So how did you -- how did you calculate the 2020
09:33:05 16 numbers for your damages analysis when you didn't have the
09:33:08 17 full year of sales data that -- for 2020?

09:33:12 18 A. You just annualize it. You've basically got two and a
09:33:16 19 half months, so you take two and half over 12, and you
09:33:20 20 basically annualize it.

09:33:21 21 Q. Was this a proper way to come up with 2020 numbers when
09:33:27 22 ASUS didn't provide their own sales data numbers?

09:33:30 23 A. It was all I could do.

09:33:36 24 Q. That covers us through 2020.

09:33:43 25 Now, 2021 is not listed on this spreadsheet. How

09:33:45 1 did you come up with those numbers? Did you perform magic?

09:33:49 2 A. No, I just used the 2020 annualized data.

09:33:52 3 Q. And how did you use it? Did you assume any growth in
09:33:56 4 the product sales?

09:33:56 5 A. I assumed no growth.

09:33:57 6 Q. So you were being conservative assuming no growth?

09:34:01 7 A. I believe so, especially when you look at prior sales
09:34:04 8 levels.

09:34:04 9 So, for instance, in 2018, which is not included,
09:34:08 10 sales for monitors were 271,000 -- \$271 million. And then
09:34:15 11 in 2019, sales for monitors were \$229,000, basically. And
09:34:21 12 then my annualized number for 2020 was \$243 million.

09:34:29 13 So you can see that that annualized number is less
09:34:32 14 than the full year number for 2018. So I felt like it was
09:34:38 15 reasonable.

09:34:38 16 Q. Okay. So it was reasonable for you to then use the
09:34:45 17 2020 full year sales number to calculate what the net
09:34:52 18 revenue sales would have generated through say May 17th,
09:34:58 19 2021?

09:34:58 20 A. It's all I had. It's all I could do.

09:35:06 21 Q. How would you go about calculating the post-trial, you
09:35:09 22 know, numbers for net revenue?

09:35:10 23 A. Yeah, you basically do -- I did the calculation through
09:35:17 24 patent expiration. I did the calculation in two parts, and
09:35:20 25 we saw that yesterday when you put up one of my -- one of

09:35:23 1 the calculation mechanics from my report where I did the
09:35:26 2 pretrial calculation and the post-trial calculation, and
09:35:28 3 then the total of both of those is the 2.8.

09:35:31 4 Q. So would you figure out the May 18, 2021, through the
09:35:37 5 patent expiration date, you know, how many years that is,
09:35:43 6 or whatever the ratio, 1.6, 1.7, based on the math, then
09:35:47 7 multiply that by the 2021 number?

09:35:49 8 A. Yeah. Same idea, just pro rata.

09:35:51 9 Q. Pro rata?

09:35:53 10 A. That's right.

09:35:59 11 MR. LEE: Can we keep the screen on, Denver?

09:36:03 12 Can we go back to the full -- and hide the model
09:36:06 13 names and just go back to full screen as the file -- as it
09:36:26 14 starts up with?

09:36:26 15 BY MR. LEE:

09:36:26 16 Q. Do you remember, you know, Mr. Oliver made a -- asked
09:36:28 17 you questions about projectors for this spreadsheet. Do
09:36:33 18 you remember looking at, you know, projector numbers under
09:36:39 19 the project LJ?

09:36:40 20 A. I do.

09:36:41 21 Q. Do you remember roughly how much in damages those
09:36:48 22 projectors accounted for your, you know, \$2.8 million lump
09:36:53 23 sum?

09:36:54 24 A. It was basically a rounding error. It was like \$6,000.
09:36:59 25 It was a very small amount of money.

09:37:00 1 Q. So when Mr. Oliver talked earlier about 10 projectors
09:37:04 2 being no longer in the case, the impact on that
09:37:09 3 \$2.8 million, based on your analysis, is how much?

09:37:13 4 A. Like \$6,000, and the number is still 2.8 if you take
09:37:17 5 that out.

09:37:18 6 Q. Do you remember yesterday, Mr. Oliver was talking to
09:37:22 7 you about marketing, whether products -- if they're not --
09:37:41 8 if the feature is not advertised doesn't mean it's not
09:37:45 9 important -- sorry. Excuse me. Strike that.

09:37:50 10 Mr. Oliver questioned you yesterday: So companies
09:37:54 11 put important features in products but don't advertise
09:37:58 12 them?

09:38:00 13 Do you remember him asking you that?

09:38:01 14 A. I remember that line of questioning, yes.

09:38:03 15 Q. Do you know whether ASUS puts up information on its
09:38:07 16 website about these color control features?

09:38:10 17 A. I do. And it excerpted some of that in my report.

09:38:14 18 MR. LEE: Denver, P-14A, please. If you could go
09:38:24 19 to Page 5 or 6. Excuse me. Page 19.

09:38:39 20 BY MR. LEE:

09:38:40 21 Q. Is this an example of what you're talking about?

09:38:45 22 A. Yeah, that's the kind of advertising or promotion that
09:38:48 23 a company like ASUS would do to promote this type of a
09:38:51 24 feature.

09:38:51 25 Q. And that would include the language for -- where ASUS

09:38:54 1 is telling folks out there: For example, you can adjust
09:38:59 2 the six colors, red, green, blue, cyan, magenta, and
09:39:05 3 yellow, without affecting the output of the other colors?

09:39:08 4 A. Yes.

09:39:09 5 Q. So, you know, by Mr. Oliver's logic, that's an
09:39:13 6 important feature there, and they're -- it's being
09:39:14 7 publicized?

09:39:15 8 A. True.

09:39:16 9 Q. Mr. Oliver also asked you this thing about hypothetical
09:39:28 10 negotiations. Do you remember that?

09:39:29 11 A. I do.

09:39:30 12 Q. Who is being sued in this case?

09:39:33 13 A. ASUS.

09:39:34 14 Q. And who is the Plaintiff in this case?

09:39:38 15 A. Lone Star.

09:39:38 16 Q. What's the purpose of the hypothetical negotiation?

09:39:40 17 A. It's basically saying if these parties met voluntarily
09:39:47 18 and wanted to do an actual transaction outside the context
09:39:52 19 of litigation, where would they land? That's what you're
09:39:56 20 trying to figure out.

09:39:57 21 Q. And you're using the Georgia-Pacific factors?

09:40:00 22 A. Yes.

09:40:00 23 Q. And why -- can you remind us why are you using the
09:40:06 24 Georgia-Pacific factors?

09:40:07 25 A. Well, first of all, it's sound economic logic, and the

09:40:11 1 Court did a good job of laying out these 15 factors. And
09:40:14 2 in a reasonable royalty case, we're instructed to use those
09:40:19 3 factors.

09:40:20 4 Q. So that's the factors that you as a damages expert need
09:40:23 5 to go and analyze in determining damages?

09:40:27 6 A. That's correct.

09:40:29 7 Q. And the purpose of doing this negotiation is to figure
09:40:35 8 out what Lone Star and ASUS would come to an agreement,
09:40:38 9 right?

09:40:38 10 A. Right.

09:40:39 11 Q. So did it make any sense to you when Mr. Oliver was
09:40:43 12 asking, you know, why didn't you consider Oplus
09:40:47 13 Technologies in this case -- because -- and he had provided
09:40:52 14 some reasons, right? Did that make sense to you?

09:40:53 15 A. I really didn't understand it, because, again, in the
09:40:56 16 construct of the hypothetical negotiation, you've got these
09:41:00 17 time lags. There's a lot of assumptions that are made. We
09:41:03 18 know Lone Star is the owner of the patent now. Did it step
09:41:05 19 into the shoes of the original owner? I don't know.

09:41:10 20 But in the construct of the hypothetical
09:41:12 21 negotiation, it makes sense to consider it, I believe the
09:41:16 22 way I did.

09:41:16 23 Q. And this hypothetic -- hypothetical negotiation -- the
09:41:19 24 hypothetical negotiation, to be clear, is not a real-world
09:41:24 25 negotiation?

09:41:24 1 A. No.

09:41:25 2 Q. We're trying to figure out what Lone Star and ASUS
09:41:28 3 would come to an agreement?

09:41:30 4 A. Yes.

09:41:32 5 MR. LEE: No further questions.

09:41:34 6 THE COURT: Redirect -- recross?

09:41:37 7 MR. OLIVER: Yes, Your Honor. Thank you.

09:41:40 8 RECROSS-EXAMINATION

09:41:46 9 BY MR. OLIVER:

09:41:47 10 Q. That last question that you were asked, the
09:41:49 11 hypothetical negotiation, you said in March of 2013?

09:41:53 12 A. I did.

09:41:54 13 Q. And like we talked about yesterday, some of the factors
09:41:58 14 involve the owner of the patent at the time of the
09:42:00 15 hypothetical negotiation?

09:42:01 16 A. Yes.

09:42:03 17 Q. So if Lone Star did not own the patent as of that date,
09:42:09 18 you wouldn't consider Lone Star at all in the negotiation,
09:42:12 19 right?

09:42:13 20 A. But we're in this hypothetical world where you can look
09:42:16 21 forward into the future, and you make certain assumptions.

09:42:19 22 So I don't know that it's not proper to assume that Lone
09:42:22 23 Star is the ultimate owner of the patent because they were.

09:42:25 24 Q. So aren't you supposed to set the analysis at the date
09:42:29 25 of the hypothetical negotiation?

09:42:31 1 A. But one of the assumptions is this idea of perfect
09:42:35 2 information that you can peer into the future and you have
09:42:38 3 this perfect information. I think one of the references to
09:42:42 4 it in some of the legal briefs that I've read is the book
09:42:47 5 of wisdom, the idea that you can look forward into the
09:42:52 6 future in this hypothetical construct.

09:42:54 7 Q. Okay. So you get to apply both magic and some unknown
09:42:59 8 wisdom?

09:42:59 9 A. Hey, those aren't my words that -- in terms of the book
09:43:04 10 of wisdom. That's the Court.

09:43:06 11 Q. Okay. But you just used them?

09:43:08 12 A. I did.

09:43:08 13 Q. Okay. But let's get to the point. March 2013 was the
09:43:13 14 date of the hypothetical negotiation. If Lone Star did not
09:43:15 15 own the patent at that date, they would not be the party
09:43:21 16 considered in that negotiation, right?

09:43:23 17 A. They could be if they are a successor to the original
09:43:28 18 owner's interest in the patent. If they're a successor and
09:43:32 19 they can essentially step into their shoes, they would.
09:43:36 20 They essentially become that company.

09:43:38 21 Q. Okay. I understand you have said that, but we were
09:43:41 22 talking about the factors in Georgia-Pacific that talk
09:43:44 23 about the owner of the patent at the time of the
09:43:45 24 negotiation, right?

09:43:47 25 A. Yes.

09:43:47 1 Q. Okay. Thank you.

09:43:49 2 I want to go back to P-94.

09:43:58 3 MR. OLIVER: Can you switch us over?

09:44:01 4 BY MR. OLIVER:

09:44:03 5 Q. Do you recall Mr. Lee did a demonstration with you on
09:44:06 6 this exhibit?

09:44:07 7 A. I do.

09:44:07 8 Q. And I'm going to do the same thing. You -- you went to
09:44:12 9 the -- you deselected everything, and you searched for PA;
09:44:18 10 is that right?

09:44:18 11 A. Yes.

09:44:18 12 Q. And then you showed a handful of models, right?

09:44:26 13 A. Yes.

09:44:26 14 Q. And then we looked for those models at 2019 and 2020
09:44:34 15 revenue, right?

09:44:35 16 A. Yes.

09:44:35 17 Q. And a bunch of those were empty?

09:44:38 18 A. Yes.

09:44:38 19 Q. And that's why you didn't include those in your
09:44:41 20 calculations?

09:44:42 21 A. If it was empty, there was nothing to include.

09:44:46 22 Q. For that product?

09:44:48 23 A. Pardon me?

09:44:52 24 Q. There was nothing to include for that product if it was
09:44:55 25 empty?

09:44:55 1 A. Yeah, if it was empty, if it was a 0, there's nothing
09:44:59 2 to include.

09:44:59 3 Q. Okay. So for this product that I've highlighted,
09:45:05 4 PA328Q, if we scroll over to 2019 and 2020, we see nothing
09:45:14 5 in 2019 and nothing in 2020, right?

09:45:16 6 A. Yes. That's on Row 1044, just for reference.

09:45:22 7 Q. Okay. So in your calculations, you didn't include any
09:45:25 8 revenue for those years for that product?

09:45:27 9 A. Yeah. Scroll back. Let's make sure.

09:45:31 10 Q. I did. Oh, I'm sorry, back to the --

09:45:34 11 A. Yeah, just scroll back. Yeah, I just wanted to make
09:45:38 12 sure where we were.

09:45:39 13 Yeah, so if it was 0 for 2019 and 2020, it would
09:45:44 14 have been a 0.

09:45:45 15 Q. Okay. But that's not true, right?

09:45:47 16 A. Well, on that -- it's true for the line that we just
09:45:51 17 looked at.

09:45:52 18 Q. You just showed me one line for that product, right?

09:45:56 19 A. No, no, no. For the line that you're making me look
09:46:00 20 at, 1044, there were 0s, so I used 0s from that line.

09:46:04 21 Q. Isn't this the demonstration that Mr. Lee just had you
09:46:11 22 do to the jury?

09:46:12 23 A. No, this is a different demonstration.

09:46:14 24 Q. I did the same search, and I'm showing the same data,
09:46:19 25 right?

09:46:19 1 A. But Mr. Lee didn't ask me the questions that you're
09:46:21 2 asking me about Row 1044.

09:46:23 3 Q. But -- and then this data that's shown here is actually
09:46:25 4 just data for one customer, right?

09:46:27 5 A. That's correct.

09:46:28 6 Q. And so if I take off that search and I select "all," go
09:46:37 7 back to the full data set, I'm going to search for that
09:46:41 8 number, PA-- PA328Q. Find it, right?

09:46:53 9 A. Okay.

09:46:54 10 Q. And then if we look at that, we see there were several
09:47:00 11 customers for that product, right, not just the one line
09:47:03 12 you showed us?

09:47:05 13 A. All right. I see that.

09:47:06 14 Q. And then when we scroll back over to the right -- let
09:47:10 15 me just select those full lines -- we see that there's some
09:47:22 16 pretty significant numbers here, right? Not the 0 number
09:47:25 17 that you gave us?

09:47:26 18 A. Yeah. No, these numbers would have been included if
09:47:29 19 those fields were populated.

09:47:31 20 Q. So for all of the non-accused products that may have
09:47:35 21 had data there, you included it whether the model number
09:47:40 22 was shown or -- or not because the customers under that
09:47:46 23 model number are people that bought that product, right?

09:47:49 24 A. I don't think I -- could you rephrase the question,
09:47:52 25 please?

09:47:52 1 Q. Okay. So you showed us a demonstration where you
09:47:56 2 showed just one line for each product, right, you and
09:48:00 3 Mr. Lee?

09:48:00 4 A. When Mr. Lee did his, he was looking at one line,
09:48:03 5 that's right.

09:48:04 6 Q. Okay. And some of those showed no data in 2019 or
09:48:07 7 2020, right?

09:48:08 8 A. That's -- that's correct.

09:48:09 9 Q. But he didn't actually show us the full set of data
09:48:13 10 that you included in your calculations for 2019 and 2020
09:48:15 11 for those products, right?

09:48:17 12 A. Well, let's be clear. You're showing me something
09:48:21 13 different than he showed me, and some of those products
09:48:24 14 have revenue and it would have been included in my
09:48:27 15 analysis.

09:48:28 16 Q. But Mr. Lee didn't show that on the screen just now?

09:48:35 17 A. What he showed was something different.

09:48:37 18 Q. Okay.

09:48:39 19 MR. OLIVER: No further questions, Your Honor.

09:48:40 20 THE COURT: Mr. Lee.

09:48:49 21 MR. LEE: P-94, Denver.

09:48:52 22 FURTHER REDIRECT EXAMINATION

09:48:52 23 BY MR. LEE:

09:48:53 24 Q. And just to be clear, for the -- for that -- you know,
09:48:57 25 testimony earlier about how you would calculate the net

09:48:59 1 revenue for 2019, 2020, through the end of trial, once you
09:49:05 2 get those numbers, how did you calculate the damages?
09:49:10 3 A. Yeah, so any numbers for revenue -- for quantity -- net
09:49:16 4 quantity, net revenue, or net cost that was in these
09:49:20 5 spreadsheets for 2019 and 2020 was included in my
09:49:24 6 calculation.

09:49:24 7 Q. And you multiplied it by the apportionment rate?

09:49:29 8 A. I multiplied the net revenue by the 14 percent
09:49:34 9 apportionment rate, that's correct.

09:49:35 10 Q. Then what would you do next to figure out the number?

09:49:39 11 A. Then I applied the 2.3 percent royalty rate against
09:49:43 12 that apportioned royalty base, and that comes up to an
09:49:46 13 effective royalty rate of three-tenths of 1 percent.

09:49:50 14 Q. And that was the methodology of how you used the data
09:49:54 15 to calculate the damages numbers?

09:49:56 16 A. Yes.

09:49:57 17 MR. LEE: No further questions, Your Honor.

09:50:00 18 MR. OLIVER: No further questions.

09:50:01 19 THE COURT: All right. You may step down.

09:50:03 20 Call your next witness.

09:50:04 21 MR. BENNETT: Your Honor, Plaintiff rests.

09:50:07 22 THE COURT: Okay. Very well, Mr. Bennett. Thank
09:50:10 23 you very much.

09:50:12 24 Subject to some legal matters that the attorneys
09:50:15 25 and I need to discuss later on outside your presence, the

09:50:20 1 Defendant may call its first witness.

09:50:23 2 MR. JOSHI: Your Honor, we call Jaime Morquecho
09:50:35 3 who will be joining us remotely.

09:50:38 4 THE COURT: All right. Is it set up?

09:50:42 5 MR. JOSHI: Mr. Morquecho -- Morquecho has joined,
09:50:45 6 we just need to --

09:50:46 7 THE COURT: All right. There he is.

09:51:07 8 Mr. Joshi, Mrs. Schroeder will need to swear in
09:51:09 9 the witness.

09:51:11 10 (Witness sworn.)

09:51:22 11 THE COURT: Okay. Mr. Joshi, you may proceed.

09:51:24 12 MR. JOSHI: Thank you, Your Honor.

09:51:25 13 JAIME MARQUECHO, DEFENDANT'S WITNESS, SWORN

09:51:27 14 DIRECT EXAMINATION

09:51:27 15 BY MR. JOSHI:

09:51:28 16 Q. Good morning, Mr. Morquecho.

09:51:30 17 A. Good morning.

09:51:31 18 Q. Would you please state your full name?

09:51:34 19 A. My full name is Jaime Morquecho.

09:51:38 20 Q. And where do you live and work, Mr. Morquecho?

09:51:41 21 A. I live in San Jose, California, and I work for ASUS
09:51:52 22 Computer International.

09:51:52 23 Q. Okay. And what is the relationship between ASUS --
09:51:56 24 well, strike that.

09:51:57 25 Do you know the relationship between ASUS Computer

09:52:07 1 International and ASUSTeK Computer, Inc.?

09:52:09 2 A. ASUS Computer International is a U.S. subsidiary.

09:52:14 3 Q. Okay. So the subsidiary, may I refer to that as ACI,

09:52:25 4 in short?

09:52:25 5 A. Yes. That's what we call it, yes.

09:52:27 6 Q. And ACI is located in which country?

09:52:30 7 A. It's in the United States.

09:52:32 8 Q. How many people work at ACI?

09:52:37 9 A. Approximately 300 to 350.

09:52:46 10 Q. And where are these employees located within the United

09:52:51 11 States?

09:52:51 12 A. The majority are in Fremont, California.

09:52:54 13 Q. Do you know a gentleman by the name of Michael McCrady?

09:53:03 14 A. Yes, I'm familiar with Michael.

09:53:06 15 Q. Who is Mr. McCrady?

09:53:09 16 A. We're colleagues at ACI.

09:53:13 17 Q. And where does he work, geographically, do you know?

09:53:17 18 A. He works remotely in Texas.

09:53:20 19 Q. What services does ACI provide?

09:53:29 20 A. We provide customer service for the products that are

09:53:37 21 sold, and there's sales and marketing.

09:53:40 22 Q. Okay. Are you aware of specific initiatives that

09:53:55 23 ASUSTeK Computer, Inc., has in the United States?

09:54:01 24 A. Well, our initiatives, we want to grow in the

09:54:05 25 commercial space, K through 12 specifically, for education.

09:54:13 1 Q. And would those initiatives occur through ACI?

09:54:17 2 A. Yes.

09:54:17 3 Q. Did you -- strike that.

09:54:26 4 Are you familiar with how sales activity happens
09:54:30 5 in the United States for ASUSTeK's products?

09:54:34 6 A. For sales activity, we have sales account managers that
09:54:43 7 will interface with distributors or resellers and collect
09:54:50 8 demand from -- from those parties, and they will place
09:54:53 9 orders from headquarters, which is overseas. And, you
09:54:59 10 know, we would import those products based on -- on those
09:55:04 11 demand or those orders, and they would be, then, sent to
09:55:08 12 the related distributors or resellers.

09:55:10 13 Q. When -- strike that.

09:55:18 14 Would you give -- strike that.

09:55:22 15 Do you know who resellers and distributors and
09:55:25 16 customers of ASUS products are in the United States?

09:55:29 17 A. We're aware of the resellers and distributors. Those
09:55:34 18 would be our customers.

09:55:35 19 Q. Could you give some examples?

09:55:38 20 A. One example of a distributor could be SYNEX, for
09:55:47 21 example. An example of a reseller could be -- you can say
09:55:52 22 Amazon.

09:55:56 23 Q. How do ASUS products arrive in the United States?

09:56:05 24 A. They -- they are imported, and they'll arrive by ocean,
09:56:12 25 for example.

09:56:13 1 Q. Are they already packaged when they arrive?

09:56:15 2 A. Yes.

09:56:16 3 Q. Are they packaged in boxes when they arrive -- when
09:56:21 4 they arrive?

09:56:22 5 A. That's correct, yes.

09:56:24 6 Q. Does anyone at ACI open those boxes before the products
09:56:32 7 are sent to the customers?

09:56:33 8 A. In general, no, since those products are sent to a
09:56:41 9 third-party warehouse, so all those materials and products
09:56:46 10 are delivered to third-party warehouses.

09:56:51 11 Q. Okay. And the products that arrive in the United
09:56:57 12 States, are they only for sale in the United States, or are
09:57:01 13 they further distributed to different countries?

09:57:06 14 A. Depends on the order, but for the majority, if they go
09:57:11 15 through United States or imported through United States,
09:57:15 16 there are other territories that the products then may --
09:57:19 17 may go to, as well, depending on who's the purchaser.

09:57:23 18 Q. Could you name some of those territories outside the
09:57:26 19 United States?

09:57:27 20 A. It would be South America.

09:57:32 21 Q. Could it be Canada?

09:57:35 22 A. It -- well, it could be Canada for North America, but
09:57:42 23 for South America, it would be other countries, yes.

09:57:47 24 MR. JOSHI: Just one second, Mr. Morquecho.

09:57:50 25 Your Honor, may I consult momentarily?

09:57:59 1 THE COURT: Yes.

09:57:59 2 BY MR. JOSHI:

09:58:00 3 Q. Mr. Morquecho, thank you very much for your time. I
09:58:03 4 have no further questions.

09:58:04 5 A. Thank you.

09:58:05 6 THE COURT: Cross-examination?

09:58:06 7 CROSS-EXAMINATION

09:58:10 8 BY MR. BENNETT:

09:58:15 9 Q. Good morning, Mr. Morquecho.

09:58:16 10 I have really just one question. You will agree
09:58:19 11 with me, won't you, sir, that companies that use the
09:58:22 12 patented technology -- patented technology of a patent
09:58:25 13 owner should use that technology only if they have licensed
09:58:30 14 that technology.

09:58:32 15 MR. JOSHI: Objection, Your Honor, outside the
09:58:37 16 scope of the direct.

09:58:37 17 THE COURT: Overruled.

09:58:39 18 THE WITNESS: In my -- my personal opinion, yes.
09:58:42 19 I would assume so.

09:58:44 20 BY MR. BENNETT:

09:58:44 21 Q. And if a company uses patented technology that they
09:58:49 22 haven't licensed, they should pay for that, right?

09:58:53 23 A. It is my personal opinion, yes.

09:58:58 24 MR. BENNETT: No more questions, Your Honor.

09:59:00 25 THE COURT: Redirect?

09:59:01 1 MR. JOSHI: Nothing further.

09:59:02 2 THE COURT: Okay. Thank you, sir. You're
09:59:04 3 dismissed.

09:59:06 4 THE WITNESS: Thank you.

09:59:06 5 THE COURT: Call your next witness.

09:59:08 6 MR. JOSHI: Your Honor, our next witness is our
09:59:22 7 expert witness, Dr. Robert Stevenson.

09:59:25 8 THE COURT: Okay. Dr. Stevenson.

09:59:27 9 Dr. Stevenson, if you would raise your right hand
09:59:46 10 to be sworn.

09:59:47 11 (Witness sworn.)

10:00:01 12 MR. JOSHI: Your Honor, we -- the parties have an
10:00:04 13 agreement that we can give our experts binders. May I
10:00:08 14 approach?

10:00:08 15 THE COURT: Yes, you may.

10:00:14 16 ROBERT LEWIS STEVENSON, PH.D., DEFENDANT'S WITNESS, SWORN

10:00:15 17 DIRECT EXAMINATION

10:00:15 18 BY MR. JOSHI:

10:00:22 19 Q. Good morning, Dr. Stevenson.

10:00:25 20 A. Good morning.

10:00:25 21 Q. Could you please state your full name for the record?

10:00:31 22 A. Robert Louis Stevenson.

10:00:34 23 Q. And where do you live, Dr. Stevenson?

10:00:36 24 A. I live in Michigan.

10:00:38 25 Q. Okay. What is your profession?

10:00:42 1 A. I'm a professor of electrical engineering at the
10:00:47 2 University of Notre Dame.

10:00:48 3 Q. When did you start teaching at Notre Dame?

10:00:51 4 A. A little over -- almost 31 years ago, 1990.

10:00:55 5 Q. What is your specialty?

10:00:57 6 A. Well, I'm an electrical engineering professor, so I
10:01:03 7 design electrical systems. My research activities in --
10:01:07 8 what I spend a lot of my time on is video and imaging
10:01:10 9 systems. I've been doing that work since the '80s.

10:01:14 10 Q. And what level of students do you teach?

10:01:17 11 A. Excuse me?

10:01:19 12 Q. Which level of students do you teach? Undergraduate?

10:01:22 13 Graduate? Postgraduate?

10:01:23 14 A. Well, I teach all levels. This semester ended last
10:01:26 15 week. I'm teaching a junior level undergraduate class, but
10:01:32 16 depending on the semester, I'll teach graduate classes, and
10:01:35 17 five or six postdoctoral students also.

10:01:40 18 Q. So your full-time job is an electrical engineering
10:01:45 19 professor; is that correct?

10:01:46 20 A. Yes.

10:01:46 21 Q. You do consulting work in addition to teaching
10:01:54 22 students?

10:01:54 23 A. Yes.

10:01:55 24 Q. Could you give us some examples of the type of
10:01:59 25 consulting work you've done?

10:02:01 1 A. Well, both inside my work with Notre Dame and outside,
10:02:05 2 I work with a lot of different companies and
10:02:11 3 U.S. government. You know, within the university context,
10:02:13 4 I do research. So in addition to teaching class, I spend a
10:02:16 5 lot of my time doing research activities in this area of
10:02:19 6 video image processing.

10:02:21 7 To do that, I get funding from the U.S. government
10:02:24 8 and from companies. I have worked with companies like
10:02:29 9 Apple, Intel, Motorola. But I've also worked with lots of
10:02:40 10 agencies within the U.S. government. You know, I spent
10:02:41 11 some time at the Air Force in the Air Force Research Lab.
10:02:44 12 I've also most recently have had money from the U.S. Navy.
10:02:49 13 I also had money from things like the national security
10:02:51 14 agency. That's kind of within the university job and doing
10:02:55 15 the research.

10:02:56 16 Outside of that, I've -- I have done various
10:02:58 17 consulting, both technical and this sort of litigation-type
10:03:01 18 consulting.

10:03:02 19 From there, that opens up another range of kind of
10:03:05 20 companies, big and small, that I worked with and got to
10:03:10 21 learn about what they're doing and help them do what
10:03:13 22 they're doing. Lots of companies you would have heard of,
10:03:20 23 like Google, Apple again, Microsoft. It's a very long
10:03:27 24 list. Samsung.

10:03:30 25 Q. When did you first start doing work for Apple?

10:03:34 1 A. Back in the '90s, I started a relationship with Apple.
10:03:42 2 They were funding my research at the university and giving
10:03:45 3 me equipment. This is where I began working on this kind
10:03:50 4 of color problem, color adjustment problem, color
10:03:53 5 calibration problem.

10:03:54 6 I was working with them. They had recently
10:03:56 7 started developing a product to deal with the fact that
10:04:01 8 when we build monitors, they can vary from monitor to
10:04:06 9 monitor. What one person decides red is, someone else can
10:04:10 10 decide is a slightly different shade of red.

10:04:13 11 That's fine if you just have maybe one monitor,
10:04:15 12 but when you start having lots of monitors, you go from one
10:04:19 13 to one, you see variations, and that's not good.

10:04:21 14 And so this is where we wanted to do some sort of
10:04:23 15 additional processing before we put the signal on the
10:04:26 16 screen in order to do some sort of adjustment. This really
10:04:30 17 became a big issue -- well, it was always kind of a big
10:04:34 18 issue, even back in -- before this, but in the kind of
10:04:36 19 computer world, it became a big issue in the -- in
10:04:40 20 the '90s. And companies like Apple were looking to solve
10:04:44 21 that problem, and they were working with people like me to
10:04:47 22 come up with solutions.

10:04:48 23 Q. What do you like about teaching?

10:04:50 24 A. Well, I like -- I like working with students. I like
10:04:56 25 helping students and helping them -- bringing them along.

10:04:59 1 You know, I -- as I said, I teach undergraduates and
10:05:01 2 graduates. Also recently I -- about five years I think
10:05:07 3 now, I took on the role as associate chair of the
10:05:12 4 department in which I oversee the undergraduate program.
10:05:15 5 So I kind of manage the undergraduate program and work with
10:05:19 6 all the students who are studying electrical engineering.

10:05:25 7 THE COURT: Dr. Stevenson, can I ask you to speak
10:05:28 8 a little more directly into the mic, please? Thank you.

10:05:31 9 THE WITNESS: Sure.

10:05:32 10 BY MR. JOSHI:

10:05:32 11 Q. Dr. Stevenson, have you provided expert opinions in
10:05:35 12 this case?

10:05:35 13 A. Yes, I have.

10:05:36 14 Q. Okay. And you have a binder that I gave you. In the
10:05:41 15 front of the binder, there is a patent.

10:05:50 16 Do you recognize this document?

10:05:52 17 A. Yes, it's the patent at issue in this case, the
10:05:58 18 so-called '435 patent.

10:05:59 19 Q. And have you issued any opinions related to this patent
10:06:03 20 in this case?

10:06:03 21 A. Yes, I have.

10:06:04 22 Q. And what are the subjects on which you have issued
10:06:09 23 opinions?

10:06:09 24 A. I have written two reports. One looking at the
10:06:14 25 infringement, and one looking at the validity of the

10:06:17 1 patent. So I have offered opinions about infringement and
10:06:20 2 validity.

10:06:22 3 Q. In the folder that I gave you, there's a Tab 2E.

10:06:33 4 Please tell me if you recognize that document.

10:06:38 5 A. 2B?

10:06:40 6 Q. One second. I may have misspoken.

10:07:16 7 Were you here in the courtroom yesterday when
10:07:20 8 Dr. Ducharme testified?

10:07:21 9 A. Yes, I was.

10:07:23 10 Q. And he testified about a patent that we refer -- we
10:07:32 11 referred to as the Brett patent. Do you recall that?

10:07:35 12 A. Yes.

10:07:35 13 Q. Have you yourself reviewed the Brett patent?

10:07:40 14 A. Yes, I have.

10:07:41 15 Q. Okay.

10:07:48 16 MR. JOSHI: Mr. Oliver, may please have DX-3 --
10:07:53 17 I'm sorry -- DX-9 brought up?

10:07:58 18 BY MR. JOSHI:

10:07:58 19 Q. Is this document familiar to you, sir?

10:08:00 20 A. Yes, this is the Brett patent you just mentioned.

10:08:06 21 Q. And what is it date on which this patent issued?

10:08:12 22 A. It would have been December 15, 1998.

10:08:18 23 Q. Well, what is the significance of that date in this
10:08:22 24 litigation?

10:08:22 25 A. Well, I think you've seen already that the so-called

10:08:26 1 priority date of the '435 was, I believe, in -- was it
10:08:34 2 2001?

10:08:34 3 Q. Please feel free to take a look at the patent.

10:08:38 4 A. The priority date was in -- yeah, 2001, August 6, 2001.
10:08:44 5 So this is well before that date. This issued -- this was
10:08:48 6 publically available in 1998. So this is a piece of prior
10:08:51 7 art. It's clearly something that occurred before the '435
10:08:54 8 invention.

10:08:54 9 Q. You used the word -- you used the words "prior art."

10:08:56 10 Could you tell members of the jury what prior art is?

10:09:00 11 A. Well, one of the issues we look at is whether, you
10:09:05 12 know, the '435 patent is a valid patent. And there's a
10:09:10 13 couple different ways that something could have gone wrong,
10:09:13 14 and it got granted, but it wasn't really valid.

10:09:17 15 One of the things is, is to look at pieces of
10:09:19 16 prior art and see if someone had come up with the invention
10:09:22 17 before the inventors of the '435 had came up with the
10:09:29 18 invention, the idea being that whoever came up with the
10:09:32 19 invention first is the one who deserves the -- the patent
10:09:34 20 protection offered by the U.S. government. And so the fact
10:09:36 21 that this is beforehand, it makes it what's called prior
10:09:39 22 art.

10:09:39 23 Q. And in rendering your expert opinion, did you compare
10:09:45 24 what is disclosed in the Brett patent with the asserted
10:09:50 25 claims of the '435 patent?

10:09:50 1 A. Yes.

10:09:51 2 Q. Please tell us what you concluded.

10:09:57 3 A. I concluded that the '435 patent was invalid based on
10:10:02 4 being anticipated by Brett.

10:10:04 5 Q. In addition to anticipation, did you also make any
10:10:12 6 determinations about obviousness?

10:10:14 7 A. Yes, I also formed the opinion that if there was any
10:10:21 8 element missing, it was an obvious thing to include into
10:10:23 9 Brett.

10:10:23 10 Q. Did you -- could you tell -- you used the word
10:10:28 11 "anticipation" and "obviousness." Could you tell members
10:10:31 12 of the jury what those words mean?

10:10:32 13 A. The idea of anticipation is that when you're looking at
10:10:41 14 this issue of validity and you're looking at the -- this
10:10:43 15 piece of prior art, whether you can find all the elements
10:10:46 16 in this one piece of prior art -- if I could find
10:10:49 17 everything being taught that the invention of the '435 is
10:10:54 18 directed at within Brett, that's anticipation.

10:11:00 19 Now, you go a little further than that because
10:11:02 20 there's things that are pretty obvious to anyone, and
10:11:05 21 especially those of skill in the art, people who would be
10:11:08 22 reading this patent. You know, if they leave out -- leave
10:11:10 23 out a minor detail that people of skill in the art know,
10:11:15 24 then it's not anticipated because it's not literally there,
10:11:22 25 but it would have obvious to a person of ordinary skill in

10:11:26 1 the art. And so that's why we also say this idea of
10:11:29 2 obviousness.

10:11:35 3 MR. JOSHI: Mr. Oliver, please help me switch back
10:11:38 4 and forth a little bit between the '435 patent and the '471
10:11:44 5 patent, which is the Brett patent. So will you please
10:11:47 6 bring up for me Claim 1 of the '435 patent, which is in
10:11:50 7 DX-1.

10:11:52 8 BY MR. JOSHI:

10:12:09 9 Q. Dr. Stevenson, what does the preamble of Claim 1 say?

10:12:16 10 A. Well, you know, when I start looking at a claim, I
10:12:18 11 start at the beginning, and quite often, there's a -- kind
10:12:22 12 of sentence that, you might say, that sets the stage before
10:12:24 13 we start getting to the individual elements. That's called
10:12:27 14 the preamble. It's that beginning language you see in
10:12:30 15 Claim 1: A method for independently controlling hue or
10:12:34 16 saturation of individual colors in a real time digital
10:12:37 17 video image, comprising the steps of.

10:12:42 18 Kind of setting the stage for all the elements of
10:12:44 19 the claim. It's called the preamble.

10:12:48 20 MR. JOSHI: Could we please go up to the abstract
10:12:51 21 of the Brett patent?

10:12:54 22 BY MR. JOSHI:

10:12:55 23 Q. Dr. Stevenson, could you tell us what an abstract is in
10:12:58 24 a patent?

10:12:59 25 A. Well, on the front page of the patent, there's some

10:13:03 1 information you've already seen, things like the issue
10:13:06 2 date, the priority date. Quite often, a diagram that --
10:13:09 3 kind of the main diagram in the patent. One of the things
10:13:14 4 is an abstract, just a -- kind of a relatively short
10:13:17 5 paragraph that kind of explains what the context of the
10:13:21 6 patent is. It'll be read quickly, and you get an idea of
10:13:25 7 what you're going to be seeing in the patent.

10:13:27 8 Q. Is there anything in the abstract of the Brett patent
10:13:33 9 that you would like the ladies and gentlemen of the jury to
10:13:35 10 know?

10:13:35 11 A. So this is an overview of Brett, this piece of prior
10:13:38 12 art. And if you just start reading from the first
10:13:40 13 sentence: A digital video processing system for correcting
10:13:43 14 video color and other attributes.

10:13:47 15 So talking about a digital video processing
10:13:50 16 system. That's what, you know, the '435 is about, is a
10:13:56 17 video processing system. And it's one for correcting
10:13:59 18 color, so it's kind of the same area, same field as
10:14:06 19 the '435.

10:14:07 20 Q. Let's go back to the preamble of Claim 1.

10:14:18 21 MR. JOSHI: Andrew?

10:14:21 22 BY MR. JOSHI:

10:14:24 23 Q. Okay. You just read the preamble to the jury,
10:14:27 24 Dr. Stevenson. Can you tell the jury where what's
10:14:34 25 disclosed in this preamble is disclosed in Brett?

10:14:40 1 A. Sure. The --

10:14:43 2 MR. JOSHI: Go back to Brett, please.

10:14:56 3 A. You know, there's a couple of ideas in the preamble
10:14:59 4 that we saw, the idea of independently controlling hue and
10:15:05 5 saturation of individual colors and the idea of the real
10:15:12 6 time digital video processing system, right?

10:15:15 7 If you go to the abstract and you go down a little
10:15:17 8 bit, you will see a sentence, starts with: Only the pixels
10:15:28 9 and/or regions of a video picture to be modified are
10:15:32 10 processed so that most pixels which are unmodified remain
10:15:36 11 free from any potential corruption -- that is, you know,
10:15:40 12 this idea of we're going to modify some of the pixels,
10:15:43 13 we're not going to modify all of the pixels.

10:15:46 14 THE WITNESS: If we go down to the diagram that's
10:15:48 15 at the bottom of the page, blow that up a little bit.

10:15:53 16 A. Now, this gets into the nitty-gritty details that only
10:16:02 17 an engineer like me would love. But this is kind the block
10:16:06 18 diagram of how this system is going to operate. And what
10:16:09 19 we have along the top is what we call the video pipeline.
10:16:12 20 It's where the video comes in on the left on the input, and
10:16:16 21 on the right is the output. And all the video gets
10:16:19 22 processed as it flows somewhat through that pipeline.

10:16:23 23 And I pointed out -- we'll get back to this in a
10:16:28 24 little bit when we talk about some of the other elements --
10:16:31 25 but you'll -- kind of in the middle of the page, you'll see

10:16:34 1 things like hue and saturation. That's -- you know, that's
10:16:37 2 what allows the Brett -- excuse me, the -- yeah,
10:16:43 3 Brett allows the adjustment of that, which allows -- it
10:16:44 4 does them separately, on two separate lines there, so this
10:16:47 5 idea of independently controlling is there.

10:16:49 6 And so we'll -- we'll come back to it as we talk
10:16:54 7 about some of the other elements, but that idea is also
10:16:58 8 going to be found in Brett.

10:16:59 9 Then finally, there's this idea of the real time
10:17:03 10 digital video system, which you can look at a couple of
10:17:08 11 different things. I think if we go to Brett --

10:17:20 12 THE WITNESS: Can I get a copy of Brett?

10:17:22 13 MR. JOSHI: Yeah, it's in your binder. Let me
10:17:28 14 give you a copy of Brett. One second.

10:17:56 15 Your Honor, may I approach?

10:17:57 16 THE COURT: You may.

10:18:16 17 A. I'll point you to a couple of different things as we
10:18:19 18 talk about the real time digital video processing system.

10:18:24 19 THE WITNESS: If we go to Column 9 around --
10:18:26 20 starting around Line 10 -- yeah, that's good right here.
10:18:44 21 The -- you'll see it kind of begins toward the top of the
10:18:48 22 -- scroll down a little further. Right there. Stop right
10:19:05 23 there.

10:19:06 24 A. You see at the top of that, what's there, it says: The
10:19:09 25 DCP -- DCP stands for digital color processor; that's

10:19:14 1 what's going to happen here -- is capable of operating in
10:19:17 2 the following modes. And it lists four modes there.

10:19:21 3 The first one is kind of on the most point:
10:19:26 4 Standard definition, main path; standard definition
10:19:29 5 modification path in real time. It's talking about the
10:19:33 6 video path that I just pointed out, the pipeline, the fact
10:19:36 7 that that's going to operate in real time.

10:19:38 8 There are other ones that -- you know, other modes
10:19:42 9 of operation that are not real time, and so it discloses
10:19:46 10 both kind of real time operation and non-real time
10:19:49 11 operation. And then at the bottom, after (d), you can see
10:19:51 12 that in all these cases, the pixel depth is 10 bits.
10:19:55 13 That's telling you it's a digital signal, so it's a digital
10:20:00 14 video processing system that's going to do color
10:20:03 15 processing.

10:20:03 16 One of the modes of operation is in real time.
10:20:10 17 There are other things we could point to that kind of
10:20:13 18 emphasizes this idea that it's a digital video processing
10:20:16 19 system that operates in real time.

10:20:24 20 If we go to Column 22, there's a section there
10:20:28 21 about Line 6 that starts: Alternative implementations.
10:20:48 22 Yeah, so this is talking about kind of these different
10:20:50 23 modes of operations. Right after you see -- there's kind
10:20:52 24 of an acronym, ASIC there. Right after that, you can see a
10:20:56 25 sentence that begins: At present, such an embodiment

10:20:59 1 provides a cost effective solution for processing digital
10:21:03 2 video images in real time, i.e., at the rate of video as
10:21:08 3 seen on television screens.

10:21:09 4 So, again, it's the idea that we have a digital
10:21:12 5 video signal, we're going to do color correction on it. We
10:21:16 6 can do this in real time for a TV signal.

10:21:20 7 BY MR. JOSHI:

10:21:20 8 Q. Okay. Thank you, Dr. Stevenson.

10:21:21 9 Were you there in the courtroom yesterday when
10:21:25 10 Dr. Ducharme testified?

10:21:26 11 A. Yes.

10:21:32 12 Q. Did you -- were you listening when he was talking about
10:21:36 13 Brett and real time?

10:21:37 14 A. Yes.

10:21:38 15 Q. What is your understanding of his opinion about Brett
10:21:40 16 and real time?

10:21:41 17 A. I find his position somewhat confusing, I guess.

10:21:45 18 The -- Brett does talk about real time and non-real time
10:21:52 19 operation, clearly. There's parts of the language you
10:21:55 20 could point to that says non-real time operation. And in
10:21:58 21 part, that's because one of the applications they
10:22:02 22 envisioned was this idea of a telecine, which is how we
10:22:11 23 transfer movies to video.

10:22:15 24 Upfront you have a movie projector in some sense,
10:22:15 25 and then you throw a piece of electronics after it that can

10:22:18 1 do this color correction. That's the idea. This is a
10:22:22 2 digital video processing system. It's going to take that
10:22:25 3 movie signal that comes out, make it digital, and process
10:22:28 4 it doing the color correction.

10:22:30 5 Depending on the type of video you want, the
10:22:32 6 system at this time was able to do it in real time or
10:22:35 7 non-real time. If you wanted to do like an IMAX movie,
10:22:39 8 probably couldn't do that in real time. So that's why you
10:22:43 9 have this non-real time operating mode.

10:22:46 10 But if you wanted to do something that you can put
10:22:48 11 on broadcast television at the time, it could do that in
10:22:52 12 real time. So that's why it had multiple modes of the
10:22:55 13 operation. I mean, it's certainly okay that Brett teaches
10:23:00 14 multiple modes. That doesn't cause a problem.

10:23:03 15 Dr. Ducharme seemed to only focus on the fact that
10:23:07 16 while it did non-real time, it seemed to ignore the fact
10:23:10 17 that it also could do this real time operation. I'm not
10:23:15 18 sure I understand why he selectively picked only parts of
10:23:19 19 the piece of art to look at that.

10:23:21 20 MR. JOSHI: Mr. Oliver, could we please go to
10:23:42 21 Figure 12? I'm sorry, maybe not Figure 12. Could you --

10:23:49 22 THE WITNESS: Figure 13?

10:23:52 23 MR. JOSHI: Yeah, could you please go to
10:23:54 24 Figure 13?

10:23:55 25 BY MR. JOSHI:

10:23:55 1 Q. Dr. Stevenson, what is shown in Figure 13 of Brett
10:23:58 2 which is DX-3?

10:24:00 3 A. This is another part of the teaching of Brett that
10:24:02 4 shows kind of a block diagram to teach someone how to use
10:24:06 5 Brett. And, again, it shows a digital video processing
10:24:11 6 system. It's showing input video, digital video, right?
10:24:17 7 YUV, you've seen that term floating around. That's a color
10:24:22 8 video. The format there, it's 10-bit 444 format. That is
10:24:26 9 a notation that an engineer would understand is a digital
10:24:30 10 video signal format. So it takes digital video in, and it
10:24:34 11 produces HDTV out. That's, you know, what you watch in
10:24:39 12 your home today, right, is HDTV. It's a digital video
10:24:43 13 system, a video display device.

10:24:47 14 So, again, it's a real time digital video system
10:24:49 15 that takes digital video and processes and displays images.
10:24:55 16 It's somewhat irrelevant that it also talks about this idea
10:24:58 17 of taking film and putting it through it.

10:25:01 18 Q. Thank you, Dr. Stevenson.

10:25:14 19 MR. JOSHI: I just want to make a correction to
10:25:06 20 something I said incorrectly. I called this Exhibit DX-3.
10:25:12 21 It should be DX-9.

10:25:20 22 Let's go back to Claim 1 of the '435 patent.

10:25:27 23 BY MR. JOSHI:

10:25:28 24 Q. The first limitation or Limitation (a) of Claim 1 of
10:25:32 25 the '435 patent is: Receiving and characterizing the real

10:25:35 1 time digital video input image featuring input image
10:25:44 2 pixels.

10:25:44 3 Dr. Stevenson, does Brett disclose this
10:25:46 4 limitation?

10:25:47 5 A. Yes. This idea is just the fact we're going to get
10:25:50 6 digital video in, and we're going to look at it in some
10:25:52 7 color space. We talked about -- you've heard about RGB,
10:25:57 8 you've heard about YUV. Brett does that.

10:26:00 9 If we look at Figure 4 -- 4A, which is part of
10:26:06 10 that diagram that was shown on the front page we've already
10:26:19 11 seen a little bit of. This -- on the front page, they kind
10:26:21 12 of combine Figure 4A and 4B, kind of side by side. So in
10:26:25 13 this figure we're looking at kind of the front half of it.
10:26:31 14 We'll see at the top there is an input side, goes into
10:26:35 15 Block 1. This is where it's receiving the video and doing
10:26:41 16 this characterization. It's moving it into --

10:26:43 17 MR. LIDDLE: Objection, Your Honor. Narrative
10:26:46 18 answer.

10:26:46 19 THE COURT: You need to break it up.

10:26:48 20 MR. JOSHI: I didn't -- I'm sorry. I didn't
10:26:50 21 hear --

10:26:51 22 THE COURT: The objection was it's a narrative
10:26:53 23 answer. Can you break it up just a little bit?

10:26:55 24 MR. JOSHI: Sure. Sure.

10:27:06 25 BY MR. JOSHI:

10:27:07 1 Q. With respect to Limitation 1(a), could you just show us
10:27:12 2 where Brett discloses what's written in 1(a), which is
10:27:12 3 receiving and characterizing the real time digital video
10:27:16 4 input image featuring input image pixel -- pixels?

10:27:19 5 A. It receives it into Block 1 there and does the
10:27:23 6 characterization by converting it into YUV, which is that
10:27:28 7 digital color space we talked about. You can see a
10:27:32 8 description of that block in the patent. If you look at
10:27:56 9 Column 8, around Line 25 -- more like 29, it talks about
10:28:16 10 that Element 1, which is that input block we were just
10:28:18 11 looking at in Figure 4. It talks about how it's able to
10:28:21 12 receive the data and provide a 10-bit or a YCrCb or YUV --
10:28:30 13 these are digital color spaces that we've seen -- and up to
10:28:33 14 75.5 megahertz range. That's just a clocking. That's how
10:28:38 15 the data is coming in. And it also talks about the next
10:28:42 16 stage which is converting it to RGB data which is, again,
10:28:45 17 another form of the digital data that we talked about.

10:28:48 18 Q. Dr. Stevenson, Limitation 1(b) of the '435 patent
10:28:52 19 reads: Selecting to independently change the hue or
10:28:57 20 saturation of an individual color in the real time digital
10:29:00 21 video input image, by selecting an independent color hue
10:29:09 22 control delta value or an independent color saturation
10:29:14 23 control delta value, respectively, wherein said independent
10:29:19 24 color hue control delta value represents an extent of
10:29:23 25 change in the hue of said selected individual color and

10:29:27 1 wherein said independent color saturation control delta
10:29:31 2 value represents an extent of change in the saturation of
10:29:34 3 said selected individual color.

10:29:37 4 Does Brett disclose this limitation?

10:29:41 5 A. Yes.

10:29:41 6 Q. Could you show us where?

10:29:44 7 A. So this idea of selecting is where the users can be
10:29:48 8 able to somehow select a color in a user interface of some
10:29:52 9 sort and be able to manipulate the hue and saturation of
10:29:58 10 that color. There's a section of Brett -- starts with a
10:30:05 11 label: User interface. Let's see, starts in Column 17,
10:30:14 12 around Line 41.

10:30:31 13 Fine for now.

10:30:31 14 So this user interface is what a person who is
10:30:36 15 going to use this system to do color correction is going to
10:30:40 16 interact with. If we just read through that first
10:30:43 17 paragraph, the user interface of the digital color
10:30:45 18 processor is designed for user friendliness. When
10:30:50 19 initially turned on, it emulates such prior 6-vector
10:30:55 20 secondary color correctors as the RCA Chromacomp, which
10:31:03 21 merely gives the operator direct control over the relative
10:31:07 22 proportions of six specific colors: the primaries, red,
10:31:11 23 green, and blue; and the secondaries, cyan, magenta, and
10:31:14 24 yellow.

10:31:14 25 This is very similar to the sort of interface we

10:31:20 1 saw in what's been called the 6-axis color control devices.
10:31:24 2 ASUS didn't invent that 6-axis color control. It actually
10:31:30 3 predates all this digital stuff back into the '70s. This
10:31:34 4 Chromacomp device that's talked about here was a very
10:31:38 5 common production piece of equipment.

10:31:40 6 MR. LIDDLE: Your Honor, objection. Narrative.

10:31:43 7 THE COURT: Can you break it up just a little bit.

10:31:43 8 BY MR. JOSHI:

10:31:47 9 Q. Yeah, please -- please break it up so we just show them
10:31:50 10 where -- where the things are. So please finish.
10:31:52 11 Continue.

10:32:03 12 A. The -- so this interface allows you select one of those
10:32:08 13 colors, red, green, blue, cyan, magenta, and yellow and
10:32:12 14 make adjustment to it. So this idea of selecting an
10:32:16 15 individual color, one of those six, is in the device.

10:32:22 16 Q. Dr. Stevenson, Limitation 1(c) of the -- let me start
10:32:26 17 again.

10:32:26 18 Dr. Stevenson, Claim Limitation (c) of Claim 1 of
10:32:30 19 the '435 patent reads: Identifying a plurality of said
10:32:36 20 individual image pixels having said selected individual
10:32:40 21 color in the real time digital video input image with the
10:32:44 22 hue or the saturation selected to be independently changed
10:32:48 23 by performing arithmetic and logical operations using input
10:32:53 24 image pixel values of each said input image pixel of the
10:32:58 25 real time digital video input image.

10:33:01 1 Does Brett disclose this limitation?

10:33:03 2 A. Yes.

10:33:04 3 Q. Could you show us where?

10:33:05 4 A. Probably the easiest place to see it is if you go back
10:33:11 5 to that Figure 4A, the main figure. This time we look
10:33:19 6 towards the bottom of the page, you'll see something -- a
10:33:23 7 block labeled 15 called the Color Identification Table.
10:33:27 8 This is the piece of circuitry that Brett uses to identify
10:33:31 9 pixels of a certain color.

10:33:33 10 Q. Dr. Stevenson, Limitation (d) of Claim 1 of the '435
10:33:44 11 patent reads as follows: Determining corresponding output
10:33:49 12 image pixel values for each of said plurality of said input
10:33:57 13 image pixels identified as having said selected individual
10:34:00 14 color in the real time digital video input image with the
10:34:04 15 hue or the saturation selected to be independently changed
10:34:09 16 by separately evaluating independent color hue control
10:34:16 17 functions, or independent color saturation control
10:34:20 18 functions respectively, using said input image pixel values
10:34:24 19 of said plurality of said input image pixels and using
10:34:29 20 corresponding said selected independent color hue control
10:34:34 21 delta value, or said corresponding selected independent
10:34:38 22 color saturation control delta value, for forming a
10:34:42 23 corresponding plurality of output image pixels having said
10:34:46 24 selected individual color with the hue or the saturation
10:34:50 25 selected to be independently changed.

10:34:53 1 Does Brett disclose this claim limitation?

10:34:55 2 A. Yes.

10:34:56 3 Q. Could you show us where?

10:34:57 4 A. Probably the easiest thing to look at is maybe the
10:35:01 5 figure on the front of the patent which combines Figure 4A
10:35:07 6 and 4B at the bottom a little bit -- seeing the whole
10:35:11 7 system there.

10:35:12 8 THE WITNESS: Scroll down a little.

10:35:18 9 A. Just to kind of explain where that processing is going,
10:35:22 10 look at the bottom, at Block 15, which is the
10:35:26 11 identification, there's where colors are being identified
10:35:30 12 and you can see it goes through another table, which is
10:35:33 13 going to figure out what are the -- how the colors are
10:35:36 14 going to be adjusted. What you can see coming out of that
10:35:40 15 is delta H and delta S, that's -- the delta triangle is a
10:35:45 16 Greek symbol engineers use for delta, but that delta H and
10:35:49 17 delta S is the delta hue and delta saturation values.

10:35:55 18 You see how they go up? Out of those, those
10:35:59 19 arrows go up, and you can see them being arithmetically
10:36:03 20 added and multiplied by the hue and saturation values that
10:36:07 21 are in that part of the pipeline. And then it goes a
10:36:09 22 little bit further, that comes out, there's some additional
10:36:12 23 circuitry because we -- ultimately, even though we like as
10:36:18 24 people to -- that -- adjust hue and saturation, the systems
10:36:24 25 are built around RGB.

10:36:25 1 So the next little bit of circuitry kind of
10:36:28 2 converts things back to red, green, and blue. You can see
10:36:31 3 coming out of the combiner there, the 14, you see delta R,
10:36:36 4 delta G, and delta B. Those are how we're going to adjust
10:36:42 5 the pixels in the actual image.

10:36:45 6 So it's figuring out those -- you know, based on
10:36:47 7 how I adjust it, the hue and saturation, it's figuring out
10:36:52 8 the delta H -- the delta red, green, and blue. And then
10:36:55 9 you can see how that data flows back up into those adders
10:37:01 10 labeled 6 in the -- kind of the main video pipeline, and
10:37:04 11 that's where we're actually effecting change in determining
10:37:07 12 the output pixels, which then flow through the rest of the
10:37:11 13 pipeline and go to the output TV display.

10:37:15 14 Q. Dr. Stevenson, Limitation (e) of Claim 1 of the '435
10:37:20 15 patent reads as follows:

10:37:23 16 And displaying a real time digital video output
10:37:28 17 image, including said corresponding plurality of said
10:37:32 18 output image pixels having said selected individual color
10:37:36 19 with the hue or the saturation selected to be independently
10:37:41 20 changed in the real time digital video input image, whereby
10:37:45 21 the hue or the saturation of said selected individual color
10:37:49 22 in the real time digital video input image has been changed
10:37:53 23 without affecting the hue or the saturation of any other
10:37:58 24 individual color in the real time digital video input
10:38:02 25 image.

10:38:02 1 Dr. Stevenson, does Brett disclose this claim
10:38:08 2 limitation?

10:38:08 3 A. Yes.

10:38:09 4 Q. Could you show us where?

10:38:10 5 A. Sure. There's -- let me stick with this figure for a
10:38:14 6 moment, at least.

10:38:16 7 There -- this identification table, and if you
10:38:19 8 look at the identification table, it's only going to
10:38:22 9 identify pixels that we selected to change. And then it's
10:38:26 10 only going to compute values that get added on only for
10:38:30 11 those pixels that are selected to be changed, those colors
10:38:33 12 that have been selected to be changed. So it's not going
10:38:35 13 to affect the other pixels.

10:38:36 14 We also saw that language in the abstract that
10:38:41 15 says it's not going to modify anything else. It kind of
10:38:44 16 confirms that understanding.

10:38:47 17 The -- ultimately, the video is going to be
10:38:49 18 output, right? So the output you see there at the far
10:38:53 19 right is the output. That's what's going to end up going
10:38:56 20 to the screen. If you look at, for instance, something
10:38:59 21 like Figure 13 --

10:39:02 22 MR. LIDDLE: Objection, narrative.

10:39:03 23 MR. JOSHI: I don't believe that one is,
10:39:05 24 Your Honor.

10:39:05 25 THE COURT: I don't, either. Overruled.

10:39:10 1 A. If you look at something like Figure 13, it talks about
10:39:12 2 the output being HDTV. That's, you know, going to a
10:39:18 3 display device. You could also find language in the -- in
10:39:24 4 the patent itself that talks about how ultimately you're
10:39:27 5 going to display the output signal, and I don't think
10:39:29 6 that's too surprising.

10:39:43 7 MR. JOSHI: Could we please go to Figure 12?

10:39:55 8 BY MR. JOSHI:

10:39:55 9 Q. Dr. Stevenson, were you in the courtroom yesterday when
10:39:58 10 I had a conversation with Dr. Ducharme about something
10:40:02 11 called HSL?

10:40:04 12 A. Yes.

10:40:07 13 Q. What is HSL?

10:40:08 14 A. They -- it stands for hue, saturation, and lightness.
10:40:12 15 It's a color space that you can represent colors in.

10:40:17 16 Q. Okay. And can an individual color be selected by using
10:40:26 17 HSL?

10:40:27 18 A. Yes. It's like RGB where you saw numbers, and it
10:40:33 19 corresponds to a color. You can come up with the same set
10:40:36 20 of numbers that you would say red is a certain hue, certain
10:40:40 21 saturation, a certain lightness.

10:40:42 22 Q. Okay. Does Dr. Ducharme dispute that?

10:40:51 23 A. He disputed, I believe, the idea that you could use
10:40:56 24 Brett to select an individual color.

10:40:58 25 Q. And how would you respond to that?

10:41:00 1 A. Well, again, I think Dr. Ducharme is being very
10:41:05 2 selective in his reading and only reading parts of the
10:41:10 3 patent.

10:41:11 4 You know, we saw in the beginning, the user
10:41:14 5 interface -- interface very much like he accuses.
10:41:17 6 The 6-axis color control where I can select, red, green,
10:41:24 7 blue, cyan, magenta, yellow. He didn't seem to like that.
10:41:29 8 He looks further in, you know, and this is a case where the
10:41:34 9 patent has multiple ideas being expressed and -- because
10:41:38 10 it's an advanced technology and it did what was kind of
10:41:42 11 standard, the 6-vector thing, and then it also added
10:41:48 12 further functionality, and that's described later on.

10:41:50 13 One of those sets of functionality kind of
10:41:55 14 corresponds to this control panel. In this control panel,
10:41:59 15 you can set a range of colors that you want to adjust. The
10:42:03 16 idea is that the buttons that are labeled 306, I can
10:42:10 17 enter -- I can basically press a button, turn the knob, and
10:42:13 18 select the hue value. I can press the button, turn a knob,
10:42:16 19 and select the saturation value and a lightness value.

10:42:20 20 So I can select a color -- the individual color
10:42:23 21 with the buttons 306, and I can go forward and select
10:42:26 22 another color with 308, the buttons at 308. I can set the
10:42:32 23 hue, saturation and lightness, so like two individual
10:42:35 24 colors. And then I can select the delta value with the
10:42:39 25 buttons at 310. So that allows me to -- those buttons

10:42:43 1 allow me to set kind of how much I want to change that
10:42:47 2 range of colors.

10:42:48 3 You know, so Brett does offer additional
10:42:55 4 functionality. You can select more than one color, but you
10:42:59 5 can also select one color, and that's what the patent
10:43:02 6 requires. And the fact that it -- Brett teaches kind of a
10:43:04 7 more advanced feature doesn't really impact my analysis and
10:43:09 8 makes me think he is...

10:43:12 9 THE COURT: Mr. Joshi, when you get to a good
10:43:15 10 breaking spot.

10:43:15 11 MR. JOSHI: Now is good, I'll move to Claim 2 now.

10:43:21 12 THE COURT: Good. Okay.

10:43:22 13 Ladies and gentlemen of the jury, we'll take our
10:43:24 14 morning recess at this time. Don't discuss the case among
10:43:29 15 yourselves until all of the evidence has been presented,
10:43:33 16 and I have instructed you on the law. We'll be in recess
10:43:37 17 about 15 minutes.

10:43:39 18 COURT SECURITY OFFICER: All rise for the jury.

10:43:41 19 (Jury out.)

11:01:15 20 (Recess.)

11:01:46 21 COURT SECURITY OFFICER: All rise.

11:01:46 22 THE COURT: Please have the jury brought in,
11:01:52 23 please.

11:01:57 24 (Jury in.)

11:02:18 25 THE COURT: Please be seated.

11:02:20 1 Mr. Joshi, you may continue.

11:02:21 2 MR. JOSHI: Thank you, Your Honor.

11:02:23 3 BY MR. JOSHI:

11:02:24 4 Q. Dr. Stevenson, welcome back.

11:02:26 5 The court reporter has a small request for you.

11:02:30 6 When you turn around to speak with the jury, please move

11:02:34 7 the microphone. She's having a hard time hearing you.

11:02:37 8 A. I'll try to keep it in a straight line here.

11:02:39 9 Q. All right.

11:02:47 10 MR. JOSHI: Mr. Oliver, would you put the Brett

11:02:49 11 patent back on the screen for me? Thank you.

11:02:52 12 BY MR. JOSHI:

11:02:53 13 Q. Dr. Stevenson, Claim 2 of the '635 [sic] patent reads

11:02:59 14 as follows: The method of Claim 1, whereby the real time

11:03:04 15 digital video input image is of a format selected from the

11:03:09 16 group consisting of RGB format, Yr -- YCrCb format, and YUV

11:03:19 17 format, whereby the individual colors of one said format

11:03:29 18 can be characterized by the individual colors of a second

11:03:32 19 said format by using appropriate linear transformation

11:03:38 20 between said formats.

11:03:40 21 Dr. Stevenson, does Brett disclose Claim 2?

11:03:46 22 A. Yes.

11:03:47 23 Q. Would you show us where?

11:03:49 24 A. We can go back to, for example, that Figure 4A.

11:03:59 25 This is talking about the input video image

11:04:03 1 signal. And you remember the top left is where we saw the
11:04:08 2 input coming in. You can easily see the YUV and the RGB
11:04:13 3 type characterization of the input signal. These
11:04:17 4 represent -- we could use that as numbers there to
11:04:19 5 represent things like red and green and blue and the other
11:04:23 6 colors.

11:04:24 7 Q. Okay. Are you finished with your answer, sir?

11:04:28 8 A. Yes.

11:04:29 9 Q. Dr. Stevenson, Claim 3 of the '435 patent reads as
11:05:04 10 follows: The method of Claim 1, whereby the real time
11:05:14 11 digital video input image features basic colors, red,
11:05:18 12 green, and blue, and complementary colors, yellow, cyan,
11:05:22 13 and magenta, in RGB color space, whereby values of said
11:05:31 14 complementary colors are expressed in terms of and
11:05:33 15 evaluated from linear combinations of values of said basic
11:05:38 16 colors.

11:05:39 17 Dr. Stevenson, does Brett disclose Claim 3 of the
11:05:43 18 '435 patent?

11:05:43 19 A. Yes. Once we have a device that expresses color in
11:05:48 20 something like RGB, the way you represent the various
11:05:51 21 colors is through linear combinations of those three
11:05:55 22 colors.

11:05:55 23 So if you want to represent yellow, cyan, or
11:05:58 24 magenta, it's a linear combination. It's some red, some
11:06:02 25 green, some blue that forms that -- all those other

11:06:05 1 individual colors.

11:06:18 2 Q. Dr. Stevenson, Claim 5 of the '435 patent reads as
11:06:26 3 follows: The method of Claim 1, whereby in Step (b),
11:06:29 4 numerical range of said independent color hue control delta
11:06:34 5 value and numerical range of said independent control
11:06:38 6 saturation control delta value corresponds to an arbitrary
11:06:42 7 interval of integers.

11:06:45 8 Does Brett disclose Claim 5?

11:06:50 9 A. Yes.

11:06:50 10 Q. Could you show us where?

11:06:52 11 A. The easiest place to see that probably -- Column 8,
11:07:31 12 Lines 18, maybe somewhere around there.

11:07:48 13 That paragraph that starts at Line, I guess, 21:
11:07:52 14 Hue can be modified through a full 360-degree range in the
11:07:57 15 cylindrical color space. Saturation and luminance can be
11:08:02 16 varied from 0 to 400 percent. Then it talks about that
11:08:07 17 they can be stored with 10-bit accuracy. That's the
11:08:11 18 digital representation we use in -- inside the device.

11:08:14 19 So you can see how we can input numbers for hue
11:08:17 20 that range from 0 to 360 and saturation 0 to 400. So that
11:08:25 21 satisfies the requirements of Claim 5.

11:08:33 22 Q. Dr. Stevenson, Claim 6 of the '435 patent reads as
11:08:36 23 follows: The method of Claim 1, whereby in Step (b),
11:08:43 24 numerical range of said independent color hue control delta
11:08:47 25 value is in an interval between minus 1 and plus 1.

11:08:53 1 Does Brett satisfy Claim 6?

11:08:56 2 A. This one is a little different in that Dr. Ducharme in
11:09:03 3 his analysis of this claim, he basically accepted the fact
11:09:07 4 that, you know, the products can be, you know -- the
11:09:12 5 sliders he points to --

11:09:14 6 MR. LIDDLE: Objection, nonresponsive.

11:09:16 7 THE COURT: I'm sorry?

11:09:18 8 MR. LIDDLE: Objection, nonresponsive.

11:09:19 9 MR. JOSHI: Your Honor, it is responsive. He's
11:09:22 10 going to tie it up.

11:09:23 11 THE COURT: Okay. I'll overrule.

11:09:26 12 THE WITNESS: The -- so while he recognized the
11:09:31 13 sliders go from 0 to 100 in the ASUS products, he said it
11:09:39 14 satisfied these elements because you can scale 0 to 100 to
11:09:44 15 minus 1 to 1.

11:09:44 16 I don't agree with that opinion, but I can do the
11:09:47 17 same an -- the same sort of interpretation that he did with
11:09:50 18 regards to Brett in this claim element.

11:09:52 19 We just saw the numbers can be ranged from 0
11:09:56 20 to 360 and 0 to 400. Well, I can scale them between
11:10:00 21 minus 1 and 1 to meet this limitation. I don't necessarily
11:10:05 22 agree with that, but, you know, it kind of meets their
11:10:08 23 approach in interpreting this claim.

11:10:27 24 BY MR. JOSHI:

11:10:27 25 Q. Dr. Stevenson, Claim 13 of the '435 patent reads as

11:10:31 1 follows: The method of Claim 1, whereby Step (d) is
11:10:37 2 performed following said identifying each said input image
11:10:41 3 pixel, one at a time, of said plurality of said input image
11:10:45 4 pixels, or is performed following said identifying entire
11:10:50 5 said plurality of said input image pixels, as having said
11:10:56 6 individual color in the digital video input image whose hue
11:11:00 7 or saturation was selected to be independently changed.

11:11:04 8 Dr. Stevenson, does Brett disclose Claim 13?

11:11:11 9 A. Yes.

11:11:13 10 Q. Could you show us where?

11:11:16 11 A. If you look starting around Column -- Column 8,
11:11:35 12 Line 36, I think we can get all of this at the same time,
11:11:37 13 but kind of going from there through the next page was the
11:11:42 14 discussion of how -- kind of the basic processing, and it
11:11:46 15 talks about -- it uses the word "serially." That's kind of
11:11:52 16 engineer speak for one at a time.

11:11:54 17 We either do things in parallel, which means we
11:11:58 18 can do them all at the same time, or we do it one at a
11:12:03 19 time, serially.

11:12:04 20 So Brett teaches doing the processing it's talking
11:12:07 21 about, this color correction, one at a time. So you do the
11:12:11 22 identification. You do the determination.

11:12:19 23 Q. Are you finished, sir?

11:12:21 24 A. Yes.

11:12:22 25 Q. Dr. Stevenson, Claim 14 of the '435 patent discloses

11:12:26 1 the following: If method of Claim 1, whereby in Step (d),
11:12:33 2 for independently controlling the hue of said selected
11:12:38 3 individual color in the real time digital video image, said
11:12:44 4 independent color hue control function is a function of
11:12:47 5 said input image pixel values of said plurality of said
11:12:52 6 input image pixels and of said corresponding selected
11:12:58 7 independent color hue control delta value.

11:13:03 8 Does Brett disclose Claim 14?

11:13:05 9 A. Yes.

11:13:06 10 Q. Could you show us where?

11:13:08 11 A. Probably the easiest thing to do is go back to the
11:13:12 12 figure on the front of the patent, the overall system.

11:13:21 13 The -- maybe working a little backwards because
11:13:25 14 we've already talked about how it -- the function of how to
11:13:29 15 change values, that was the circuitry, kind of at the
11:13:33 16 bottom and on the right-hand side, that was going to feed
11:13:37 17 up the change values into 6 that we're going to modify the
11:13:41 18 RGB values.

11:13:42 19 So that kind of circuitry on the right, that one
11:13:47 20 that's highlighted, the blocks below it, the multiplication
11:13:52 21 additions in 12. That was all the function that's going to
11:13:57 22 modify the color values.

11:13:59 23 So this is now talking about how does that
11:14:01 24 function get performed, how does -- what are the inputs to
11:14:04 25 that functions, and it's basically -- Claim 14 requires

11:14:09 1 that the input stream is used to form that function.

11:14:13 2 And you can see -- you can see how that works by
11:14:16 3 looking at the flow of data again, so we have our input
11:14:20 4 pixels. You can see the -- you know, kind of the -- it's
11:14:24 5 labeled corrected R -- corrected R -- corrected G, and
11:14:28 6 corrected B, that's part of the signal in the pipeline.

11:14:31 7 And then you see lines coming down below that into 3A,
11:14:36 8 which then feed itself down into what's called the digital
11:14:40 9 matrix coordinate translator. That's kind of the math
11:14:45 10 we're going to do in order to figure out how we're going to
11:14:48 11 adjust the colors.

11:14:49 12 So the input pixels come in, go through that path
11:14:52 13 on the 3A to 11, and you can see how we have hue and
11:15:01 14 saturation kind of separately. I don't know which one is
11:15:05 15 which. 14 requires you change hue, I think, the functions
11:15:09 16 for hue. And the second -- 15 is saturation, which is just
11:15:13 17 kind of the other parallel one there. So this -- this
11:15:18 18 meets the limitation of the input pixels being used to
11:15:23 19 control the values you get for the output.

11:15:28 20 Q. Dr. Stevenson, Claim 15 of the '435 patent reads as
11:15:33 21 follows: The method of Claim 1, whereby in Step (d), for
11:15:39 22 independently controlling the saturation of said selected
11:15:42 23 individual color in the real time digital video image, said
11:15:49 24 independent color saturation control function is a function
11:15:52 25 of said input image pixel values of said plurality of said

11:15:56 1 input image pixels and of said corresponding selected
11:16:02 2 independent color saturation control delta value.

11:16:07 3 Does Brett disclose Claim 15?

11:16:09 4 A. So 14 and 15 are very similar. One basically says
11:16:14 5 hue -- do this function with hue, and the other one says
11:16:18 6 saturation. So, you know, I kind of showed you the same
11:16:21 7 circuitry. The fact that we end up having a hue path and a
11:16:25 8 saturation path, you know, means one path satisfies 14 and
11:16:28 9 the other one satisfies 15.

11:16:34 10 Q. Dr. Stevenson, we went through Claims 1, 2, 3, 5, 6,
11:16:46 11 13, 14 and 15 of the '435 patent. Those claims are
11:16:51 12 asserted in this case?

11:16:53 13 A. Yes.

11:16:53 14 Q. Is it your opinion that Brett anticipates or makes
11:16:58 15 obvious all of those claims?

11:17:00 16 A. Yes.

11:17:05 17 MR. JOSHI: Your Honor, the Defendant moves to
11:17:07 18 admit DX-9 into evidence.

11:17:09 19 THE COURT: Any objection?

11:17:11 20 MR. LIDDLE: No objection.

11:17:13 21 THE COURT: It'll be received.

11:17:24 22 BY MR. JOSHI:

11:17:24 23 Q. I'll move to a new topic, Dr. Stevenson.

11:17:31 24 Have you given any opinions in this litigation on
11:17:33 25 a topic known as double patenting?

11:17:36 1 A. Yes.

11:17:37 2 Q. Could you tell the members of the jury what double
11:17:40 3 patenting is?

11:17:41 4 A. The basic idea is that you -- while you can get a
11:17:48 5 patent, you can't get two patents on the same invention.

11:17:55 6 Q. Okay. In your binder, Doctor, I would like you to go
11:18:07 7 to Tab 2, and then within that tab, go to a sub-tab I, as
11:18:19 8 in indigo, I.

11:18:39 9 Are you there, sir?

11:18:40 10 A. Yes.

11:18:41 11 Q. Okay. Do you recognize this document?

11:18:44 12 A. Yes.

11:18:44 13 Q. Have you reviewed this document?

11:18:47 14 A. Yes.

11:18:48 15 Q. Are you here to offer an opinion about this document
11:18:52 16 today?

11:18:53 17 A. Yes.

11:18:53 18 Q. And what is this document?

11:18:56 19 A. This document is Patent -- U.S. Patent 6,122,012.

11:19:09 20 MR. JOSHI: May I please have -- Mr. Oliver, may I
11:19:29 21 please have DX-3 displayed? Thank you.

11:19:33 22 BY MR. JOSHI:

11:19:45 23 Q. Dr. Stevenson, when was this patent issued?

11:19:52 24 A. September 19, 2000.

11:19:54 25 Q. And when would the term of this patent end?

11:19:57 1 A. The -- I'm not a lawyer, so I'm not sure you should
11:20:06 2 quote me on this, but you get about 20 years for a patent.
11:20:10 3 I'm not sure if that's from the priority date or issue
11:20:13 4 date. So somewhere in 1999 or 2000 -- 2019 or 2020 the
11:20:20 5 patent would have expired.

11:20:23 6 Q. And who are the inventors of this patent?

11:20:27 7 A. Segman and Yaacov.

11:20:32 8 Q. Okay. And who is mentioned as the assignee of this
11:20:36 9 patent?

11:20:36 10 A. Sorry. Say again?

11:20:39 11 Q. Who is mentioned as the assignee of this patent?

11:20:44 12 A. A company called Oplus Technologies.

11:20:49 13 MR. JOSHI: And, Mr. Oliver, could you please
11:20:52 14 bring DX-1 back on the screen?

11:20:59 15 BY MR. JOSHI:

11:20:59 16 Q. Who are the inventors of the '435 patent?

11:21:02 17 A. The same two people, Segman and Yaacov.

11:21:08 18 Q. And who is the assignee of the '43 patent [sic]?

11:21:12 19 A. The same company, Oplus Technologies.

11:21:15 20 Q. And what is the date of issuance of this patent?

11:21:22 21 A. April 20, 2004.

11:21:25 22 Q. And what is the filing date of this patent?

11:21:31 23 A. August 6, 2001.

11:21:34 24 Q. Okay. And how does that date compare to the filing
11:21:41 25 date of the '012 patent? If you could please go back to

11:21:50 1 that.

11:21:50 2 A. It's roughly two years later.

11:21:52 3 Q. Okay. Thank you.

11:22:03 4 To form your opinion about double patenting, what
11:22:06 5 did you do?

11:22:08 6 A. Well, in double patenting, it's about this idea of an
11:22:14 7 inventor trying to get -- claim the same invention in two
11:22:18 8 different patents.

11:22:19 9 MR. LIDDLE: Objection, nonresponsive.

11:22:21 10 MR. JOSHI: This is just a preliminary to his
11:22:23 11 answer, Your Honor.

11:22:23 12 THE COURT: Overruled.

11:22:24 13 THE WITNESS: So what I needed to do was look at
11:22:27 14 the claims of the '435, that's the invention of the '435,
11:22:34 15 relative to the claims of the '012 and to see if they were
11:22:38 16 going to cover the same invention.

11:22:41 17 BY MR. JOSHI:

11:22:41 18 Q. And when you compared the asserted claims of the '435
11:22:48 19 patent with the assert claims of the '012 patent, what did
11:22:54 20 you discover?

11:22:55 21 A. I found that they were the same invention.

11:22:57 22 Q. Okay.

11:23:11 23 MR. JOSHI: Let's -- let's stay with this patent.

11:23:16 24 BY MR. JOSHI:

11:23:28 25 Q. Dr. Stevenson, the preamble of Claim 1 of the '435

11:23:34 1 patent reads as follows: A method for independently
11:23:38 2 controlling hue or saturation of individual colors in a
11:23:43 3 real time digital video image comprising the steps of.

11:23:50 4 Does the '012 patent disclose the preamble of
11:24:00 5 Claim 1 of '435 patent?

11:24:03 6 A. Yes.

11:24:03 7 Q. Could you show us where?

11:24:07 8 A. We're going to turn to the claims of the '012, and
11:24:11 9 we'll look at two claims, Claim 1 and 4. Start with
11:24:23 10 Claim 1. You can see it's a method of selectively
11:24:27 11 controlling an individual color of a digital video image.
11:24:31 12 So that is the same sort of thing we're doing in the '435,
11:24:38 13 right? We're controlling an individual color, we're
11:24:40 14 controlling it -- selectively controlling that -- of a
11:24:47 15 digital video input signal.

11:24:51 16 Go down a little bit further to Claim 4, you can
11:24:55 17 see this idea of saturation being one of those things we're
11:25:01 18 going to control here. So Claim 4 is: A method of
11:25:12 19 Claim 1, whereby said color control parameters include a
11:25:17 20 plurality of tangents, whereby each of said plurality of
11:25:20 21 tangents is used to control saturation of all individual
11:25:24 22 color in the digital video input image.

11:25:27 23 So this idea of selectively controlling and
11:25:32 24 controlling saturation is expressed in the '012.

11:25:36 25 Q. Dr. Stevenson, do you know what "obviousness-type

11:25:40 1 double patenting" is?

11:25:42 2 A. Yes.

11:25:43 3 Q. Please tell the members of the jury what obviousness
11:25:48 4 type-double patenting is.

11:25:50 5 A. Well, it's kind of like the obviousness we talked about
11:25:54 6 before in that you don't have to word for word be exactly
11:25:57 7 the same. If there's something that's well known to a
11:26:00 8 person of ordinary skill in the art, someone who -- an
11:26:03 9 engineer who would be reading this patent, they would know
11:26:06 10 it because it's something they do all the time, that's
11:26:09 11 okay. You can kind of fill in that missing word or two
11:26:12 12 with this idea of it would be obvious to a person of
11:26:22 13 ordinary skill in the art.

11:26:27 14 Q. Dr. Stevenson, Limitation (a) of Claim 1 of the '435
11:26:30 15 patent reads as follows: Receiving and characterizing the
11:26:35 16 real time digital video input image featuring input image
11:26:41 17 pixels.

11:26:49 18 Is that limitation disclosed in claims of the '012
11:26:53 19 patent?

11:26:53 20 A. Yes, that shows up in -- kind of broken up into
11:26:56 21 Element (a) and (b) of the -- of the '012.

11:26:56 22 Q. Yeah, please --

11:27:11 23 A. Claim 1 --

11:27:15 24 MR. JOSHI: Claim 1 and 2 of the '012. Thank you.

11:27:18 25 A. So (a) talks about this idea of receiving. So it says:

11:27:21 1 Receiving the digital video input image, featuring pixels.

11:27:26 2 So we have the receiving idea.

11:27:27 3 And then (b) is the characterizing idea.

11:27:31 4 Characterizing a digital video input image and its target

11:27:34 5 output image. So we received it and characterized it which

11:27:38 6 is what 1(a) of the '435 requires.

11:27:42 7 BY MR. JOSHI:

11:27:50 8 Q. Okay. Were you in the courtroom yesterday, sir, when

11:27:52 9 Dr. Ducharme talked about double patenting?

11:27:54 10 A. Yes.

11:27:55 11 Q. Were you listening when he expressed his opinion about

11:27:59 12 differences between the '435 patent and the '012 patent?

11:28:04 13 A. Yes.

11:28:05 14 Q. What is your understanding of what he said?

11:28:12 15 A. He basically said that because the '012 talks about

11:28:21 16 lookup tables and in order to do the modification of pixels

11:28:31 17 and the identification of pixels, the '435 requires

11:28:38 18 arithmetic and logical operators. That, to him, was a

11:28:43 19 substantial difference so that's why they were not the same

11:28:46 20 invention.

11:28:47 21 Q. Could you please maybe speak into the microphone a

11:28:47 22 little bit?

11:28:47 23 A. Yeah.

11:28:47 24 Q. Just pull it towards you, if you like.

11:28:47 25 MR. JOSHI: May I approach, Your Honor? Just want

11:28:50 1 to give him --

11:28:50 2 THE COURT: It would help.

11:28:50 3 BY MR. JOSHI:

11:29:06 4 Q. Do you agree or disagree with Dr. Ducharme?

11:29:08 5 A. I disagree with him.

11:29:09 6 Q. Could you tell the members of the jury why you disagree
11:29:13 7 with Dr. Ducharme?

11:29:14 8 A. Arithmetic and logical operators are the basis of
11:29:20 9 digital systems. That's what we do in digital systems, and
11:29:24 10 that's how we manipulate data. We use lookup tables the
11:29:28 11 same way. We use them with logical and arithmetic
11:29:33 12 operators. You don't use a lookup table without also doing
11:29:38 13 those sort of operations.

11:29:41 14 So in some sense, a lookup table is nothing more
11:29:45 15 than a form of arithmetic and logical operators. We use
11:29:50 16 them because they can be very -- they can be quicker. And
11:29:53 17 so when we're building these very fast systems, these
11:29:58 18 systems deal with a lot of data in a very short amount of
11:30:01 19 time, we try to speed that up by this well-known technique
11:30:06 20 called lookup tables. But at the end of the day, we are
11:30:09 21 still doing arithmetic and logical operators, so I don't
11:30:13 22 see where he sees this big difference.

11:30:16 23 Q. Thank you, Doctor. I lost track a little bit. Did we
11:30:23 24 already do 1(b)?

11:30:24 25 A. No, I do not believe we have.

11:30:27 1 Q. Okay. So, Dr. Stevenson, Limitation (b) of Claim 1 of
11:30:30 2 the '435 patent reads as follows: Selecting to
11:30:35 3 independently change the hue or the saturation of an
11:30:40 4 individual color in the real time digital video input
11:30:43 5 image, by selecting an independent color hue control delta
11:30:49 6 value or an independent color saturation control delta
11:30:54 7 value, respectively, wherein said independent color hue
11:31:00 8 control delta value represents an extent of change in the
11:31:03 9 hue of said selected individual color and wherein said
11:31:10 10 independent color saturation control delta value represents
11:31:11 11 an extent of change in the saturation of said selected
11:31:14 12 individual color.

11:31:21 13 Dr. Stevenson, do claims of the '012 patent
11:31:27 14 disclose the limitation of Claim 1(b) of the '435 patent?
11:31:32 15 A. Yes. And, again, we'll go to a couple different claim
11:31:36 16 elements in the '012. Start with 1(e) of the '012. We'll
11:31:52 17 see the language of 1(e) talks about individual color
11:32:00 18 control functions which is what 1(b) is talking about
11:32:04 19 setting up, these individual color control functions,
11:32:07 20 according to an individual color for calculating values.
11:32:11 21 So we're talking about colors. We're talking about
11:32:13 22 calculating values for that.

11:32:17 23 We go down to 1(f). We are selecting values to
11:32:22 24 control -- to color control parameters in the set of
11:32:28 25 individual color control functions. So we're setting up

11:32:30 1 these functions. We're using the individual color
11:32:37 2 control -- individual colors to set control parameters,
11:32:39 3 which gives us these functions that we can manipulate.

11:32:44 4 And then finally, 4(e) -- Element 4. Here, it's
11:32:51 5 just talking about a little more generally in terms of
11:32:56 6 color control parameters. 4 -- Element 4 is where --
11:33:01 7 Claim 4 is where we get into this idea of that control
11:33:04 8 parameter, it can be saturation, which is the subject of
11:33:07 9 the '435.

11:33:07 10 Q. Okay.

11:33:11 11 A. So we'll see -- we're going to control saturation here.
11:33:17 12 So, you know, 1 is a little bit broader in the sense that
11:33:21 13 it doesn't specify hue or saturation; 4 has that limitation
11:33:26 14 of controlling saturation.

11:33:29 15 Q. Dr. Stevenson, before I asked you my previous question,
11:33:40 16 I had asked you a little bit about Dr. Ducharme. And I
11:33:45 17 asked you what your understanding was of what he said about
11:33:52 18 the differences between '012 and '435. I believe you
11:33:56 19 mentioned lookup table. Did Dr. Ducharme point to any
11:33:59 20 other difference?

11:34:01 21 A. No.

11:34:06 22 MR. LIDDLE: Objection. That mischaracterizes the
11:34:11 23 testimony of Dr. Ducharme.

11:34:12 24 THE COURT: I'll overrule it.

11:34:14 25 MR. LIDDLE: Thank you.

11:34:16 1 THE WITNESS: I believe he said the word "in
11:34:18 2 part," but he never explained what the "in part" was.

11:34:21 3 THE COURT: I'm sorry. Did you say something
11:34:23 4 else?

11:34:23 5 MR. LIDDLE: I did not.

11:34:31 6 BY MR. JOSHI:

11:34:31 7 Q. Dr. Stevenson, I think you said something about "in
11:34:33 8 part." I just heard that. Could you explain what you
11:34:37 9 meant?

11:34:37 10 A. Well, I recall when you kind of crossed him on the
11:34:40 11 subject and you said something similar to what you just
11:34:43 12 said to me about just lookup tables, he said his opinion
11:34:47 13 was based in part on lookup tables, but I didn't hear him
11:34:51 14 ever tell us what the other part might have been. So in
11:34:54 15 terms of what he told us, it seemed like it was just lookup
11:35:00 16 tables.

11:35:00 17 Q. Okay. Dr. Stevenson, Limitation (c) of Claim 1 of
11:35:05 18 the '435 patent reads as follows: Identifying a plurality
11:35:11 19 of said input image pixels having said selected individual
11:35:19 20 color in the real time digital video input image with the
11:35:23 21 hue or the saturation selected to be independently changed
11:35:27 22 by performing arithmetic and logical operations using input
11:35:34 23 image pixel values of each said input image pixel of the
11:35:38 24 real time digital video input image.

11:35:43 25 Do the claims of the '012 patent disclose

11:35:49 1 limitation 1(c) of the '435 patent?

11:35:52 2 A. Yes.

11:35:55 3 THE WITNESS: When we go to the claims -- the '012
11:35:57 4 and start with 1(c).

11:36:13 5 A. In 1(c), it's talking about the selecting an individual
11:36:16 6 color of the digital video image to be controlled.

11:36:19 7 THE WITNESS: Move down to 1(e).

11:36:25 8 A. We can see where it's talking about for calculating
11:36:29 9 values in said set of individual color lookup tables. So
11:36:33 10 we're calculating these function values. We're putting
11:36:36 11 them into a table.

11:36:42 12 THE WITNESS: Go down to Claim 4.

11:36:46 13 A. We get back to this idea of saturation and explanation
11:36:54 14 of how -- what values we're actually calculating. So it
11:36:59 15 gives an idea of the function, whereby each of said
11:37:03 16 plurality of changes is used to control saturation for all
11:37:06 17 individual color in the digital video input image.

11:37:09 18 So we're putting in these values that we selected,
11:37:15 19 we're computing values that we're going to have, and we're
11:37:20 20 going to put them in a lookup table. And that's -- like I
11:37:23 21 said, the lookup table is about efficient processing. It's
11:37:26 22 still doing arithmetic and logical operators to generate
11:37:29 23 those values, to put them in the table. And ultimately
11:37:32 24 even to use the table, they're still doing arithmetic and
11:37:36 25 logical operators.

11:37:37 1 Q. Are you finished with your answer, sir?

11:37:39 2 A. Yes.

11:37:48 3 Q. Dr. Stevenson, Claim Limitation 1(d) of the '435 patent
11:37:51 4 reads as follows: Determining corresponding output image
11:37:58 5 pixel values for each of said plurality of said input image
11:38:03 6 pixels identified as having said selected individual color
11:38:06 7 in the real time digital video input image with the hue or
11:38:11 8 the saturation selected to be independently, changed, by
11:38:16 9 separately evaluating independent color hue control
11:38:20 10 functions or independent color saturation control
11:38:23 11 functions, respectively, using said input image pixel
11:38:26 12 values of said plurality of said input image pixels, and
11:38:30 13 using corresponding said selected independent color hue
11:38:38 14 control delta value, or said corresponding selected
11:38:41 15 independent color saturation control delta value, for
11:38:42 16 forming a corresponding plurality of output image pixels
11:38:45 17 having said selected individual color with the hue or the
11:38:49 18 saturation selected to be independently changed.

11:38:53 19 Dr. Stevenson, do claims of the '012 patent
11:38:59 20 disclose Limitation 1(d) of the '435 patent.

11:39:04 21 A. Yes.

11:39:05 22 Q. Would you show us where?

11:39:08 23 A. There's a whole bunch of words, and luckily we've seen
11:39:12 24 most of them before so we don't have to go through every
11:39:15 25 single one of them.

11:39:16 1 The idea that's -- you know, that kind of the new
11:39:19 2 piece of this is the fact that we're going to actually
11:39:23 3 compute output, right, this getting of it, determining
11:39:24 4 corresponding output image pixels.

11:39:27 5 THE WITNESS: If we look at 1(i) of the '012.

11:39:32 6 A. That reads: Determining values of pixels in said
11:39:43 7 target output image from said new values in said set of
11:39:50 8 individual color lookup tables.

11:39:52 9 So this is the output side. We're going to use
11:39:54 10 those lookup tables. We're going to use those tables to
11:39:57 11 determine the output. And so all the other ideas that are
11:39:59 12 expressed there, we've already kind of hit before.

11:40:02 13 BY MR, JOSHI:

11:40:02 14 Q. Okay. The last limitation of Claim 1, which is 1(e) of
11:40:06 15 the '435 patent, reads as follows: Displaying a real time
11:40:15 16 digital video output image including said corresponding
11:40:20 17 plurality of said output image pixels having said selected
11:40:24 18 individual color with the hue or the saturation selected to
11:40:28 19 be independently changed in the real time digital video
11:40:31 20 input image, whereby the hue or the saturation of said
11:40:34 21 selected individual color in the real time digital video
11:40:39 22 input image has been changed without affecting the hue or
11:40:42 23 the saturation of any other individual color in the real
11:40:47 24 time digital video input image.

11:40:50 25 Dr. Stevenson, does -- do the claims of the '012

11:40:54 1 patent disclose Limitation 1(e) of the '435 patent?

11:40:58 2 A. Yes.

11:40:59 3 Q. Could you show us where?

11:41:01 4 A. There's two main ideas expressed in this element. One
11:41:06 5 is the simple fact that we're going to display the output.

11:41:10 6 The other one is that because of all the
11:41:12 7 processing, while we've changed the pixels we've
11:41:15 8 identified, we have not changed the other ones. So you can
11:41:18 9 see both of those expressed in the '112 -- excuse me --
11:41:26 10 the '012, Element 1(j), which you see in the beginning
11:41:33 11 reads: Displaying said target output image on a video
11:41:36 12 display device.

11:41:37 13 So there's your display of the output, and then
11:41:40 14 towards the end you can see: Whereby all other colors in
11:41:44 15 the digital video image remain unchanged.

11:41:47 16 So this is the idea we have not affected the other
11:41:50 17 colors that we haven't identified.

11:42:02 18 Q. Dr. Stevenson, Claim 2 of the '435 patent reads as
11:42:08 19 follows: The method of Claim 1, whereby the real time
11:42:11 20 digital video input image is of a format selected from the
11:42:16 21 group consisting of RGB format, YCrCb format, and YUV
11:42:26 22 format, whereby the individual colors of one said format
11:42:30 23 can be characterized by the individual colors of a second
11:42:33 24 said format by using appropriate linear transformations
11:42:37 25 between said formats.

11:42:40 1 Dr. Stevenson, does -- do the claims of the '012
11:42:46 2 patent disclose Claim 2 of the '435 patent?

11:42:49 3 A. Yes.

11:42:49 4 Q. Could you show us where?

11:42:51 5 A. If we go to Claim 2 of the '012, the idea being --
11:43:00 6 expressed in Claim 2 of the '435 is the idea that, you
11:43:04 7 know, we have this -- the digital image data is in one of
11:43:08 8 three formats: RGB, YUV, or YCrCb.

11:43:13 9 And so if you look at Claim 2, of the '01 -- '012,
11:43:19 10 we can see that: Whereby an individual color represents a
11:43:21 11 linear combination of base colors, said base colors
11:43:26 12 comprising red, green, blue, yellow, cyan, and magenta.

11:43:30 13 So we have the same sort of set of base colors
11:43:34 14 that we can express as a linear combination any of the
11:43:37 15 other colors.

11:43:38 16 Q. Okay. Dr. Stevenson, Claim 3 of the '435 patent reads
11:43:54 17 as follows: The method of Claim 1, whereby the real time
11:43:58 18 digital video input image features basic colors red, green,
11:44:02 19 and blue, and complementary colors yellow, cyan, and
11:44:07 20 magenta in RGB color space, whereby values of said
11:44:12 21 complementary colors are expressed in terms of and
11:44:17 22 evaluated from linear combination -- combinations of values
11:44:19 23 of said basic colors.

11:44:26 24 Dr. Stevenson, do the claims of the '012 patent
11:44:30 25 disclose Claim 3 of the '435 patent?

11:44:32 1 A. Yes.

11:44:33 2 Q. Could you show us where?

11:44:35 3 MR. LIDDLE: Objection, Your Honor, outside the
11:44:36 4 scope of his report.

11:44:38 5 THE COURT: Was this disclosed?

11:44:39 6 MR. JOSHI: Yeah, I'm looking at it right now.

11:44:41 7 It's in -- it's in one of the charts attached to his expert
11:44:46 8 report. Exhibit E.

11:44:49 9 MR. LIDDLE: It all would be obvious in view of
11:44:53 10 these limitations. It doesn't say it's disclosed.

11:45:01 11 THE COURT: Mr. Joshi?

11:45:01 12 MR. JOSHI: What is the objection? I'm sorry.

11:45:03 13 MR. LIDDLE: Outside the scope.

11:45:05 14 MR. JOSHI: It is --

11:45:05 15 THE COURT: You're saying it's an opinion that's
11:45:08 16 not been previously disclosed?

11:45:10 17 MR. LIDDLE: I'm saying it exceeds the scope of
11:45:13 18 his expert testimony. He explains that it's obvious in
11:45:18 19 light of this but does not say it's disclosed.

11:45:22 20 MR. JOSHI: Well, I had a discussion with him
11:45:25 21 earlier about obviousness-type double patenting, and it can
11:45:32 22 be discussed in a literal way, or it can be discussed --
11:45:34 23 disclosed in an obvious way.

11:45:36 24 THE COURT: Well, I think what I understand the
11:45:40 25 Plaintiff to be objecting to is that he may have given an

11:45:44 1 obviousness opinion but not an anticipation opinion.

11:45:49 2 Is that correct? Is that what you're saying?

11:45:53 3 MR. LIDDLE: That is, yes.

11:45:55 4 MR. JOSHI: Okay. All right. I'll rephrase my
11:45:58 5 question, Your Honor.

11:45:59 6 THE COURT: Fair enough.

11:46:03 7 BY MR. JOSHI:

11:46:04 8 Q. Dr. Stevenson, what is your opinion regarding double
11:46:29 9 patenting regarding Claim 3 of the '435 patent and claims
11:46:40 10 of the '012 patent?

11:46:43 11 A. That Claim 3 of the '435 patent would be invalid
11:46:52 12 because it would be obvious to one of skill in the art
11:46:57 13 based on the claims of the '012 patent.

11:47:02 14 Q. Okay.

11:47:02 15 MR. JOSHI: Are you able to hear him?

11:47:04 16 THE REPORTER: Not really.

11:47:04 17 THE COURT: It's hard.

11:47:05 18 MR. JOSHI: Yeah, okay.

11:47:06 19 BY MR. JOSHI:

11:47:07 20 Q. Could you -- could you show us why?

11:47:09 21 A. Sure. We just saw the language in Claim 2 of the '012
11:47:14 22 a moment ago.

11:47:15 23 THE WITNESS: If we pull that back up.

11:47:20 24 A. You can see in that language it talks about red, green,
11:47:24 25 blue, yellow, cyan, and magenta, those same colors that are

11:47:28 1 being discussed. You know, the claim requires that you can
11:47:36 2 evaluate the -- the secondary colors, the yellow, cyan, and
11:47:43 3 magenta, based on a linear combination of the basic colors
11:47:47 4 red, green, and blue.

11:47:48 5 That doesn't quite say that here. It just talks
11:47:51 6 about the six colors, but those working in the art
11:47:55 7 understand those relationships very well. We deal with
11:47:58 8 those colors all the time. We understand how they're --
11:48:02 9 they form linear combinations and how you create yellow,
11:48:06 10 cyan, and magenta from red, green, and blue. It's
11:48:09 11 something that's incredibly common. So I think it would be
11:48:14 12 obvious to one skilled in the art that that element is
11:48:18 13 found.

11:48:22 14 BY MR, JOSHI:

11:48:22 15 Q. Dr. Stevenson, Claim 5 of the '435 patent reads as
11:48:26 16 follows: The method of Claim 1, whereby in Step (b),
11:48:31 17 numerical range of said independent color hue control delta
11:48:36 18 value and numerical range of said independent color
11:48:39 19 saturation control delta value corresponds to an arbitrary
11:48:44 20 interval of integers.

11:48:50 21 Dr. Stevenson, is it your opinion that Claim 5 of
11:48:56 22 the '435 patent is obvious in view of one or more claims of
11:49:04 23 the '012 patent?

11:49:06 24 A. Yes.

11:49:06 25 Q. Could you tell us why?

11:49:08 1 A. Sure.

11:49:10 2 THE WITNESS: If we go back to Claim 1 of the '012
11:49:16 3 and look at Elements (e) and then (f).

11:49:34 4 A. What you see there is disclosed -- and what's claimed
11:49:38 5 the idea is first in (e) finding a set of individual color
11:49:43 6 control functions. So we have these functions. And then
11:49:45 7 in 1(f), assigning values to the color control parameters.
11:49:51 8 So we have these functions. We're going to -- we're going
11:49:53 9 to figure them out based on values we have inserted.

11:49:56 10 What is not disclosed and why it's obvious is this
11:49:59 11 idea of a range of integers -- an arbitrary interval of
11:50:06 12 integers I think the language is. That's how engineers
11:50:09 13 work, especially when you're talking about a computer
11:50:11 14 system. All we deal with is --

11:50:12 15 MR. LIDDLE: Your Honor, objection. He said, not
11:50:14 16 disclosed. We move to strike that comment.

11:50:17 17 THE COURT: Mr. Joshi?

11:50:18 18 MR. JOSHI: Yeah, just a second, Your Honor.

11:50:39 19 Here -- here's what he does say, Your Honor.

11:50:42 20 THE COURT: Okay.

11:50:42 21 MR. JOSHI: The range, 32767 to 3276 -- through
11:50:56 22 32767 --

11:50:57 23 MR. LIDDLE: Your Honor, I'm not sure I want
11:50:59 24 Mr. Joshi testifying for Mr. Stevenson.

11:51:03 25 THE COURT: Well, I have to know what's --

11:51:06 1 MR. LIDDLE: Can we approach with the --

11:51:07 2 THE COURT: I'm sorry?

11:51:09 3 MR. LIDDLE: Can we approach with the --

11:51:10 4 THE COURT: If it's necessary.

11:51:30 5 Come over here.

11:54:18 6 (Bench conference.)

11:54:18 7 MR. JOSHI: This is Claim 6 talking about the
11:54:18 8 minus 1 to plus 1 range.

11:54:18 9 MR. LIDDLE: I think we're on Claim 5. What did
11:54:18 10 you have on the last --

11:54:18 11 MR. JOSHI: I didn't get this one. Just one
11:54:18 12 second.

11:54:18 13 THE COURT: He wants to know if we're on Claim 5
11:54:18 14 or Claim 6. That's what he is asking.

11:54:18 15 MR. JOSHI: Claim 5, and it would be -- that's 14
11:54:18 16 so that's not 5. So here he says he's specifying the range
11:54:18 17 of independent color hue control delta value hes no more
11:54:18 18 than obvious. He's talking about one of ordinary skill.

11:54:18 19 THE COURT: Is that enough?

11:54:18 20 MR. LIDDLE: If he says that, it's fine, but he
11:54:18 21 keeps saying it's -- those are anticipated and disclosed
11:54:18 22 and he is making a 102 argument.

11:54:18 23 MR. JOSHI: The question I asked him is it obvious
11:54:18 24 and he said yes, it's obvious.

11:54:18 25 THE COURT: Make sure he does not use the word

11:54:18 1 "disclosed."

11:54:18 2 MR. LIDDLE: Thank you, Your Honor.

11:54:18 3 MR. JOSHI: Thank you.

11:54:30 4 (Bench conference ended.)

11:54:30 5 MR. LIDDLE: And, I'm sorry, Your Honor, can we
11:54:33 6 get a ruling on moving to strike his disclosure?

11:54:35 7 THE COURT: Yes, it's overruled.

11:54:35 8 BY MR. JOSHI:

11:54:44 9 Q. So just to be -- just to be clear, Dr. Stevenson, we
11:54:48 10 are -- with respect to Claim 5 we're talking about
11:54:51 11 obviousness-type double patenting, correct?

11:54:54 12 A. Yes.

11:54:54 13 Q. Okay. Please continue your answer and just keep in
11:55:13 14 mind that we're talking about obviousness and not
11:55:17 15 anticipation in our analysis here. So go ahead.

11:55:19 16 A. Sure. The -- well, in Claim 5, this idea of the -- the
11:55:24 17 values are in arbitrary interval of integers, that's not
11:55:33 18 literally disclosed, but it would be obvious to one of
11:55:36 19 ordinary skill in the art.

11:55:38 20 All right. So when we build these systems, we
11:55:40 21 build digital systems, all we deal with are numbers. You
11:55:45 22 know, there's nothing else in those systems, a
11:55:48 23 representation of numbers. And when we build things like
11:55:50 24 knobs and we rotate them or push them or whatever, or
11:55:54 25 sliders, they're numbers at the end of the day that we

11:55:59 1 manipulate within the digital system.

11:56:02 2 So I guess why it doesn't say that literally in
11:56:06 3 the claim, it would certainly be obvious to one of ordinary
11:56:10 4 skill in the art.

11:56:13 5 Q. Dr. Stevenson, Claim 6 of the '435 patent reads as
11:56:24 6 follows: The method of Claim 1, whereby in Step (b),
11:56:29 7 numerical range of said independent color hue control delta
11:56:34 8 value is an interval between minus 1 and plus 1.

11:56:42 9 Dr. Stevenson, is it your opinion that Claim 6 of
11:56:50 10 the '435 patent is obvious in view of one or more claims of
11:56:56 11 the '012 patent?

11:56:58 12 A. It is my opinion that it is obvious.

11:57:00 13 Q. Could you tell us why?

11:57:02 14 A. Well, it's the same sort of issue as the -- as the
11:57:06 15 previous claim. And what's changed in the language here is
11:57:09 16 the previous claims was an arbitrary interval of integers.
11:57:15 17 This one is between negative 1 and 1. That's an obvious
11:57:20 18 variation. If I could have an interval -- arbitrary
11:57:24 19 interval of intervals, I could pick negative 1 to 1.

11:57:29 20 Q. Dr. Stevenson, Claim 13 of the '435 patent reads as
11:57:35 21 follows: The method of Claim 1, whereby Step (d) is
11:57:41 22 performed following said identifying each said input image
11:57:48 23 pixel one at a time of said plurality of said input image
11:57:53 24 pixels, or, is performed following said identifying entire
11:57:59 25 said plurality of said input image pixels, as having said

11:58:03 1 individual color in the digital video input image whose hue
11:58:08 2 or saturation was selected to be independently changed.

11:58:18 3 Dr. Stevenson, is it your opinion that Claim 13 of
11:58:25 4 the '435 patent is obvious --

11:58:28 5 A. Yes.

11:58:31 6 Q. -- over one or more claims of the '012 patent?

11:58:36 7 A. I believe it would be obvious, yes.

11:58:37 8 Q. Could you tell us why?

11:58:41 9 A. The -- as we've already seen in one of the primary
11:58:49 10 elements, we determine an output, right, and we determine
11:58:52 11 an output based on a look-up table.

11:58:55 12 The -- what this -- Claim 13 is requiring that we
11:59:01 13 either do that one at a time or all at a time, right, that
11:59:04 14 idea is kind of you have one or the other.

11:59:08 15 Look-up tables are used, engineers know this, one
11:59:11 16 at a time. You look up one value in the table, you find
11:59:15 17 that value, you use it. So it's -- while it's not
11:59:19 18 literally disclosed, it certainly would be obvious to one
11:59:23 19 of skill in the art that that's how you're going to use a
11:59:26 20 look-up table to determine the values.

11:59:33 21 Q. Claim 14 of the '435 patent reads as follows: The
11:59:39 22 method of Claim 1, whereby in Step (d) for independently
11:59:44 23 controlling the hue of said selected individual color in
11:59:46 24 the real time digital video image, said independent color
11:59:53 25 hue control function is a function of said input image

11:59:57 1 pixel values of said plurality of said input image pixels
12:00:01 2 and of said corresponding selected independent color hue
12:00:08 3 control delta value.

12:00:11 4 Dr. Stevenson, is it your opinion that Claim 14 of
12:00:17 5 the '435 patent is obvious in view of one or more claims of
12:00:24 6 the '012 patent?

12:00:26 7 A. Yes, it is.

12:00:27 8 Q. Could you tell us why?

12:00:28 9 A. Well, we can look at a couple of different claims of
12:00:35 10 the '012, right, this Claim 14 adds the idea that the
12:00:43 11 control function we have is a function of our input pixels
12:00:48 12 in the hue control delta value.

12:00:55 13 The -- if we look at 1(e) of the '012, you see the
12:01:04 14 idea of we have individual color control functions. So we
12:01:08 15 have those functions.

12:01:09 16 In 1(f), what we have are values to color control
12:01:15 17 parameters of said individual color control function. So
12:01:21 18 we have values to control those. Those are the delta
12:01:24 19 values.

12:01:24 20 And then Claim 3, it says: A function of
12:01:31 21 values -- we can see that the look-up tables, which is
12:01:42 22 ultimately what we populate with these control functions,
12:01:46 23 is a function of values of said pixels of chromatic
12:01:53 24 components of the digital video input image.

12:01:56 25 And so that's saying that the input side -- the

12:01:57 1 digital signal is being used -- the input pixels are being
12:02:02 2 used.

12:02:03 3 So we have the idea of, you know, the control
12:02:05 4 functions. We have the idea of the control data value
12:02:09 5 affecting those functions, and that the input to those are
12:02:12 6 the input functions. The one element that is not literally
12:02:20 7 disclosed is this idea of hue.

12:02:22 8 The color control function is read a little
12:02:25 9 broadly than that, right? So it's saying any sort of color
12:02:29 10 control is what's claimed in the '012. Well, hue is just a
12:02:33 11 type of color control, very typical, used in all these
12:02:39 12 systems because it's a nice, intuitive control for users.

12:02:43 13 So I think it would be obvious to one of skill in
12:02:46 14 the art that if I'm going to talk about color controls, one
12:02:49 15 of the things I'm going to think about is things like hue
12:02:52 16 and saturation.

12:02:54 17 Q. Dr. Stevenson, Claim 15 of the '435 patent reads as
12:03:08 18 follows: The method of Claim 1, whereby in Step (d), for
12:03:36 19 independently controlling the saturation of said selected
12:03:39 20 individual color in the real time digital video image, said
12:03:43 21 independent color saturation control function is a function
12:03:48 22 of said input image pixel values of said plurality of said
12:03:54 23 input image pixels and of said corresponding selected
12:03:58 24 independent color saturation control delta value.

12:04:01 25 Dr. Stevenson, is it your contention that Claim 15

12:04:09 1 of the '435 patent is obvious in view of one or more claims
12:04:13 2 of the '012 patent?

12:04:14 3 A. I believe it's obvious.

12:04:15 4 Q. Could you tell us why?

12:04:16 5 A. It's -- it's much like this previous claim, as I've
12:04:20 6 already discussed. The difference between Claim 14 and 15
12:04:24 7 is swapping out hue and saturation. So for a lot of the
12:04:28 8 same reasons, saturation is just another color control type
12:04:33 9 idea. So it's -- would be obvious, kind of, really based
12:04:38 10 on exactly what we just did for 14.

12:04:41 11 In addition, however, we also have Claim 4, which
12:04:47 12 talks about one of those control parameters can be
12:04:51 13 saturation. If we look at Claim 4 of the '012, the idea of
12:04:55 14 control and saturation is also there, so we're actually
12:04:58 15 even closer.

12:05:00 16 Q. Dr. Stevenson, we just now reviewed Claims 1, 2, 3, 5,
12:05:14 17 6, 13, 14, and 15 of the '435 patent. Is it your opinion,
12:05:24 18 sir, that the inventors of the '435 patent received two
12:05:29 19 different patents for the same invention?

12:05:30 20 A. Yes.

12:05:34 21 MR. JOSHI: Your Honor, Defendant moves to add
12:05:42 22 DX-3 into the evidence.

12:05:45 23 THE COURT: Any objection?

12:05:47 24 MR. LIDDLE: No objection.

12:05:48 25 THE COURT: Very well. It'll be received.

12:05:51 1 MR. JOSHI: Your Honor, I'm about to switch to
12:05:54 2 non-infringement and it's the noon hour, so this would be a
12:05:58 3 good time for a break for me.

12:06:00 4 THE COURT: All right. Let's go ahead and break
12:06:02 5 now.

12:06:03 6 Ladies and gentlemen of the jury, your lunch
12:06:05 7 should be here, and we'll plan to be in recess about an
12:06:07 8 hour.

12:06:08 9 Don't discuss the case among yourselves until all
12:06:11 10 of the evidence has been presented and I've instructed you
12:06:15 11 on the law.

12:06:17 12 We'll be in recess.

12:06:19 13 COURT SECURITY OFFICER: All rise for the jury.
12:06:21 14 (Jury out.)

12:08:36 15 THE COURT: Okay. We'll be in recess.
12:08:36 16 (Recess.)

01:15:36 17 MR. BENNETT: Your Honor, we have an issue that we
01:15:39 18 need to raise with the Court.

01:15:40 19 THE COURT: All right.

01:15:41 20 MR. BENNETT: At 7:19 this morning, I sent an
01:15:45 21 email to opposing counsel, indicating that we hadn't
01:15:48 22 received any demonstratives for use with Dr. Stevenson's
01:15:52 23 direct, despite the Court's order, or part and Paragraph 3
01:15:53 24 of the trial management order, which requires that: A
01:15:54 25 party shall provide demonstrative exhibits to be used in

01:15:58 1 connection with direct examination, including
01:16:00 2 non-documentary demonstratives or live product
01:16:05 3 demonstration, by 6:30 p.m. the calendar day before their
01:16:10 4 intended use.

01:16:11 5 We got nothing.

01:16:12 6 This morning, I walked into court having not
01:16:14 7 received an answer to my email at 7:19 this morning. At
01:16:18 8 8:30, I spoke with Mr. Joshi, who told me they were not
01:16:22 9 using any demonstratives.

01:16:22 10 THE COURT: Okay.

01:16:24 11 MR. BENNETT: At this point we have a monitor set
01:16:26 12 up with a picture from the Wizard of Oz and a whole bunch
01:16:31 13 of something. I don't know what's going to happen or what
01:16:32 14 demonstratives will be used despite the fact that none have
01:16:33 15 been disclosed.

01:16:34 16 MR. JOSHI: Okay. So that's a screen saver.
01:16:37 17 We're not going to do anything with the Wizard of Oz.

01:16:37 18 THE COURT: We're not going to see the Wizard of
01:16:40 19 Oz?

01:16:40 20 MR. JOSHI: We're not watching Wizard of Oz. We
01:16:44 21 are not -- we don't have any documentary demonstratives.
01:16:46 22 I've used just the exhibits. All he's going to do is the
01:16:51 23 user interface that Dr. Ducharme adjusted, the red and the
01:16:54 24 green and the yellow colors on back and forth. This is not
01:16:58 25 something that we could have shared. It's just something

01:17:01 1 that we needs to be done live, and it's a repeat of
01:17:05 2 something the jury has already seen multiple times.

01:17:08 3 THE COURT: Seems like that's fair, Mr. Bennett.

01:17:11 4 MR. BENNETT: If --

01:17:11 5 MR. JOSHI: And it's an exhibit that's been
01:17:13 6 admitted, 11.

01:17:17 7 THE COURT: Yeah.

01:17:17 8 MR. BENNETT: That's not --

01:17:17 9 THE COURT: I think the witness -- or what
01:17:19 10 Mr. Joshi is saying the witness is going to do is what
01:17:22 11 other witnesses have done during the course of the trial.

01:17:25 12 MR. BENNETT: That's not what we were told, and
01:17:27 13 that's fine.

01:17:27 14 THE COURT: Sure.

01:17:28 15 MR. BENNETT: But no demonstratives have been
01:17:30 16 disclosed, so as long as it's limited to that.

01:17:31 17 THE COURT: Well, as long as we don't see any
01:17:33 18 demonstratives, we won't have a problem.

01:17:35 19 MR. JOSHI: Yes.

01:17:36 20 THE COURT: Let's have the jury in, please.

01:17:39 21 COURT SECURITY OFFICER: Please rise for the jury.

01:17:39 22 (Jury in.)

01:18:06 23 THE COURT: Please be seated.

01:18:08 24 Mr. Joshi, you may continue.

01:18:10 25 MR. JOSHI: Thank you, Your Honor.

01:18:12 1 BY MR. JOSHI:

01:18:12 2 Q. Welcome back, Dr. Stevenson. So we're going to switch
01:18:18 3 gears now. We talked about validity. Now I want to talk
01:18:23 4 about infringement.

01:18:24 5 So I would like the members of the jury to
01:18:26 6 understand the difference. When you did your validity
01:18:32 7 analysis, you compared the claims of the '435 patent with
01:18:38 8 what?

01:18:39 9 A. To validity and look at reasons why it might be
01:18:45 10 invalid. I compared it to that Brett reference and found
01:18:49 11 it was invalid. And then I also compared it to the
01:18:52 12 inventor's own piece of art, the '012, and found it
01:18:59 13 invalid.

01:18:59 14 Q. And there are a couple of terms -- you used the word --
01:19:05 15 term "invalid." What does that mean?

01:19:08 16 A. Basically it means -- I think it was a mistake that the
01:19:12 17 Patent Office granted the patent. It shouldn't -- didn't
01:19:16 18 have all the information I had, so I understand the source
01:19:19 19 of the mistake. When you spend as much time as I have and
01:19:23 20 having seen all the references -- but if they had all that
01:19:26 21 stuff, I believe they would have come to a different
01:19:30 22 conclusion about granting the patent.

01:19:31 23 Q. So the validity analysis, if I understand correctly, is
01:19:34 24 about whether inventors should or should not have received
01:19:40 25 a patent in the first place; is that correct?

01:19:43 1 A. Correct.

01:19:43 2 Q. And when you did your infringement analysis, you
01:19:46 3 compared the '45 patent -- '435 patent claims with what?

01:19:54 4 A. So the other side of the issue is infringement, whether
01:19:57 5 ASUS products practice the claims. And so at that point
01:20:01 6 I'm comparing the accused products that are in this case
01:20:05 7 against the claims of the '435 patent.

01:20:10 8 MR. JOSHI: Could I please have DX-1 brought back
01:20:19 9 up, please? All right. Mr. Oliver, will you please go to
01:20:45 10 Claim 1?

01:20:46 11 BY MR. JOSHI:

01:20:50 12 Q. Okay. So now, in Claim 1, what we see is there are --
01:20:58 13 there's a preamble, and then there are Limitations (a),
01:21:03 14 (b), (c), (d), and (e).

01:21:10 15 MR. JOSHI: Would you mind zooming out just a
01:21:14 16 little bit so we can see the whole claim? Okay.

01:21:20 17 BY MR. JOSHI:

01:21:20 18 Q. So that's the whole claim. It's got five limitations,
01:21:25 19 (a) through (e).

01:21:27 20 Dr. Stevenson, please tell the members of the
01:21:35 21 jury, for ASUS to not infringe Claim 1, how many of these
01:21:40 22 limitations does it not -- must it not infringe?

01:21:45 23 A. I found that a little confusing, but I think the basic
01:21:51 24 question is -- you know, the basic point is that to not
01:21:55 25 infringe, all you got to do is -- if you don't practice

01:21:58 1 every single element, you don't infringe. So you have to
01:22:02 2 practice every single element to infringe. Conversely, to
01:22:08 3 not infringe, as long as you don't practice one of those
01:22:13 4 elements, you're not infringing.

01:22:14 5 Q. So if ASUS products do not practice any one of these
01:22:18 6 five limitations, then ASUS would not infringe entire
01:22:22 7 Claim 1; is that correct?

01:22:23 8 A. Correct.

01:22:24 9 Q. So if the members of this jury were to decide that ASUS
01:22:38 10 does not practice one or more limitations of Claim 1, what
01:22:41 11 would happen to Claim 2?

01:22:44 12 A. You -- Claim 2 is one of these dependent claims we've
01:22:48 13 been looking at, and to practice -- you know, to infringe
01:22:52 14 Claim 2, you have to do everything in Claim 2, plus
01:22:55 15 everything in Claim 1. So you have to do kind of both.
01:23:00 16 Claim 2 adds something on, you might say.

01:23:02 17 So if you're not infringing Claim 1, you're
01:23:05 18 already missing an element. Adding something on with
01:23:10 19 Claim 2, you're still missing that same element. So once
01:23:14 20 you don't infringe Claim 1, you really can't infringe any
01:23:18 21 of the dependent claims either.

01:23:20 22 Q. Are all the claims in this litigation that are not
01:23:22 23 Claim 1, dependent claims of Claim 1?

01:23:26 24 A. Yes. Claim 1 is what's called independent. Everything
01:23:30 25 else is dependent.

01:23:31 1 Q. So the answer that you just now gave with respect to
01:23:35 2 Claim 2, would that also apply to Claims 3, Claim 5,
01:23:43 3 Claim 6, Claims 13, 14, and 15?

01:23:48 4 A. Yes. If Claim 1 is not infringed, the rest of them
01:23:51 5 can't be infringed either.

01:24:07 6 Q. Dr. Stevenson, do you know that the Court has provided
01:24:10 7 definitions for the terms "hue" and "saturation"?

01:24:13 8 A. Yes.

01:24:14 9 Q. Did you review those definitions when you did your
01:24:23 10 analysis for infringement?

01:24:25 11 A. Yes.

01:24:25 12 Q. When you reviewed the definitions the Court has
01:24:37 13 provided for hue and saturation, did you notice the word
01:24:47 14 "brightness" in those definitions anywhere?

01:24:50 15 A. I don't recall that word being used.

01:24:51 16 Q. Okay. Let me -- let me refer you to your expert report
01:24:56 17 where you have the definitions.

01:25:10 18 There's a tab in your binder there, Tab No. 4, and
01:25:31 19 I would ask you to go to Page 16. Please let me know when
01:25:55 20 you're ready.

01:25:56 21 A. I'm ready. I've looked at them.

01:26:03 22 Q. Okay. In the definitions of hue and saturation that
01:26:07 23 the Court has provided, does the term "brightness" appear
01:26:10 24 anywhere?

01:26:11 25 A. No.

01:26:11 1 Q. Does the term "gain" appear anywhere?

01:26:16 2 A. No.

01:26:17 3 Q. What did you say?

01:26:18 4 A. No.

01:26:28 5 Q. Does the term "contrast" appear anywhere?

01:26:31 6 A. No.

01:26:32 7 Q. Now, Dr. Stevenson, you've been here during the trial,
01:26:43 8 correct?

01:26:43 9 A. Most of it.

01:26:44 10 Q. Most of it? And you know that there has been a lot of
01:26:49 11 discussion about 3-axis products and 6-axis products?

01:26:53 12 A. Yes.

01:26:53 13 Q. Do you know -- do you know what they are? Not asking
01:26:57 14 you -- I'm just asking, do you know what they are?

01:27:01 15 A. I know what they're referring to, yes.

01:27:03 16 Q. Okay. And the products that we have been referring to
01:27:06 17 as 3-axis and 6-axis, do they operate the same or
01:27:11 18 differently for the purposes of what's happening in this
01:27:18 19 case?

01:27:18 20 A. No, they operate very differently in terms of how they
01:27:22 21 can adjust color.

01:27:23 22 Q. We --

01:27:27 23 MR. JOSHI: Could we make Claim 1 a bit larger?

01:27:32 24 It's okay if you can only cover half of it. That's fine.

01:27:38 25 Okay. That's good. That's good.

01:27:40 1 BY MR. JOSHI:

01:27:40 2 Q. So with respect for -- with respect to Claim 1, are
01:27:45 3 there any noninfringement arguments that apply to both the
01:27:52 4 3-axis products and what we've been referring to as 6-axis
01:27:56 5 products?

01:27:56 6 A. Yes, there are positions I take and that apply to all
01:28:01 7 products.

01:28:01 8 Q. Would you tell us one noninfringing position that
01:28:06 9 applies to all products?

01:28:08 10 A. You can see in Element 1(b), this is the selecting
01:28:12 11 element, it talks about selecting independently changed hue
01:28:20 12 or saturation.

01:28:20 13 If you look a little bit further at that element,
01:28:22 14 it talks about using a -- by selecting an independent color
01:28:28 15 hue control value or an independent color saturation
01:28:33 16 control value. I didn't see anything in the products that
01:28:36 17 looked like a -- that was a delta value or hue or
01:28:55 18 saturation.

01:28:55 19 MR. JOSHI: May I please have Exhibit 14A. And
01:29:18 20 could you go to the very last page. Yeah, there. And
01:29:21 21 could you zoom in on the top half of the page.

01:29:26 22 BY MR. JOSHI:

01:29:31 23 Q. Dr. Stevenson, as you know, we have repeatedly looked
01:29:36 24 at this user interface in this trial; is that correct?

01:29:40 25 A. Yes.

01:29:40 1 Q. And that No. 50 that is shown there, is it or is it not
01:29:52 2 a delta value?

01:29:53 3 A. It is not.

01:29:55 4 Q. Would you tell the members of the jury why it is not
01:29:57 5 the delta value?

01:29:59 6 A. Maybe we should talk a little bit about what it means
01:30:03 7 to be a delta value.

01:30:05 8 Q. Let me ask a question. What is a delta value in the
01:30:09 9 context of Claim 1?

01:30:10 10 A. I think the easiest way to explain delta value is to
01:30:14 11 use an analogy.

01:30:20 12 I drive with cruise control all the time, and, you
01:30:23 13 know, I can set up -- I can go 60 miles an hour, and I can
01:30:27 14 hit my cruise button, and I've set my absolutely speed.
01:30:31 15 All right. So that's setting an absolute speed.

01:30:35 16 I have another button that I can push, and that
01:30:37 17 increases the temperature [sic] by plus 1, versus the other
01:30:45 18 way, and it goes minus 1. I press it hard, it goes plus 5.
01:30:47 19 I press it real hard, it goes minus 5. Those are two
01:30:50 20 different types of controls.

01:30:53 21 One I can set the absolute value by turning it on
01:30:57 22 and setting at 60, and then the other one I'm just setting
01:31:01 23 a delta value. I'm going up 5 or down 5, or up 1, minus 1.
01:31:07 24 That's a delta value because that's telling you the
01:31:07 25 difference, right. If it operates -- if I'm at 30 and I

01:31:08 1 hit plus 5, I get to 35. I don't get to 65. I didn't set
01:31:16 2 that absolute value. I set a difference from where I am.

01:31:17 3 So delta is this idea of a difference value, not
01:31:22 4 an absolute value. The -- you know, the claims of the
01:31:26 5 patent talk about a specific way of controlling the hue and
01:31:29 6 the contrast, and that's with these delta values.

01:31:32 7 Q. But you don't believe this is a delta value?

01:31:36 8 A. No, it's an absolute value. It's like setting the
01:31:41 9 speed limit -- my speed of the car 50 miles an hour.

01:31:45 10 Q. And with respect to the products that we have been
01:31:47 11 referring to as 3-axis and 6-axis, what kind of product is
01:31:51 12 this?

01:31:51 13 A. This is one of the 6-axis products.

01:31:55 14 Q. Okay. Do the 3-axis hours -- let's start again.

01:32:03 15 Same question with respect to 3-axis products.
01:32:09 16 How do they do the adjustments?

01:32:12 17 A. The interface looks very different because actually the
01:32:16 18 functionality, what is going on is very different.

01:32:20 19 But the -- here Dr. Ducharme pointed to a slider,
01:32:25 20 and the slider went from 0 to 100. I think it defaulted at
01:32:30 21 50. So it's the same sort of idea that I can set the
01:32:35 22 absolute value, I can set my speed, but I can't really
01:32:38 23 set -- I don't interface it by saying go plus 5. I set the
01:32:44 24 absolute value.

01:32:45 25 Q. So Dr. Ducharme showed a slider to the jury. Do you

01:32:49 1 recall that?

01:32:49 2 A. Yes.

01:32:49 3 Q. I would like you to show the jury the same slider and
01:32:53 4 explain the answer that you gave now.

01:32:55 5 A. Coming down here?

01:32:56 6 MR. JOSHI: Your Honor, may our witness come down?

01:32:59 7 THE COURT: Yes, yes. As long as he has a
01:33:03 8 microphone.

01:33:03 9 MR. JOSHI: If you just turn on the microphone
01:33:06 10 that -- and then it has a clip so you can put it on your
01:33:09 11 pocket if you like or just hold it. Just click it once and
01:33:15 12 then you stop.

01:33:16 13 May we please switch to the Elmo, ma'am?

01:33:49 14 That's fine. Let me help zoom in.

01:33:49 15 BY MR. JOSHI:

01:33:54 16 Q. Please go ahead.

01:34:01 17 A. Okay. So this is one of the so-called 3-axis products,
01:34:05 18 and this is the main menu that you can pull up. The menu
01:34:13 19 he went into was the -- the color menu, and then the color
01:34:32 20 temperature menu.

01:34:34 21 MR. LIDDLE: Objection, Your Honor.

01:34:35 22 THE COURT: What's the objection?

01:34:37 23 MR. LIDDLE: I think we're about to do a
01:34:39 24 demonstrative here.

01:34:40 25 THE COURT: Overruled.

01:34:48 1 A. And then select the user mode. And this is where
01:34:55 2 you've got to -- the RGB settings that were available, and
01:35:01 3 you can see it's set to 50, and where you can adjust it up
01:35:06 4 and down from there from 0 to 100, setting the absolute
01:35:10 5 value of the red, the absolute value of the green, and the
01:35:17 6 absolute value of the blue. In this case, the gain, not
01:35:17 7 the hue or the saturation, but set the absolute value, not
01:35:40 8 a delta value.

01:35:40 9 BY MR. JOSHI:

01:35:41 10 Q. Thank you, Dr. Stevenson.

01:35:42 11 I want to amplify a couple of things you just said
01:35:46 12 there. I believe your first argument was it's not a delta.
01:35:49 13 Could you please tell us again what you said?

01:35:59 14 A. In the -- for the 3-axis products, you can -- going
01:36:02 15 through the menus, you can select this color temperature
01:36:06 16 user mode which allows you to select the gain of the red,
01:36:11 17 green, and blue components. You can set, as we saw in the
01:36:14 18 other menu, an absolute value. I could set it to 50, I
01:36:18 19 could set it to 100, I could set it to 75. You know, kind
01:36:20 20 of like setting the speed to 50 miles an hour.

01:36:23 21 What I can't do is bump it by five -- five values,
01:36:27 22 or something like that, or plus 1, minus 1, things like
01:36:30 23 that. There's nothing -- no control like that. So I can't
01:36:33 24 enter a delta value unlike what the claim requires.

01:36:37 25 Q. And you said something else. I heard you use the word

01:36:40 1 "gain," g-a-i-n. What did you say?

01:36:44 2 A. Well, unlike in the 6-axis where I went into a
01:36:48 3 saturation menu and I could adjust values of something
01:36:51 4 like red, here I was -- I was selecting a color temperature
01:36:56 5 that allowed me to select -- change the gain of red, green,
01:37:00 6 or blue on different quantities, different things. They're
01:37:04 7 not -- it's not saturation.

01:37:07 8 Q. Let's go back to Claim 1.

01:37:14 9 MR. JOSHI: I'm sorry to bother you again, ma'am,
01:37:17 10 but we'll need the -- thank you.

01:37:19 11 Can we please go back to Claim 1?

01:37:27 12 BY MR. JOSHI:

01:37:28 13 Q. Is there another noninfringement argument that you
01:37:31 14 have, Dr. Stevenson, that would apply to both the 3-axis
01:37:36 15 and the 6-axis products?

01:37:38 16 A. Yes. If we scroll down a little bit to Element (c),
01:37:43 17 this is the identification step where we identify -- well,
01:37:49 18 the claim requires you to identify various image pixels
01:37:53 19 that you're going to modify. I don't believe this is
01:37:56 20 infringed -- this is practiced by the products either.

01:37:59 21 Q. Okay. Could you tell the jury why this is not
01:38:02 22 infringed?

01:38:04 23 A. This -- this gets a little more complicated.

01:38:09 24 The -- I talked about the -- kind of the pipeline
01:38:15 25 that -- that we generate building these systems. In

01:38:19 1 opening, I heard the Plaintiff talk about 50 million pixels
01:38:24 2 we have to process. That's right. We do. We have a lot
01:38:26 3 of data being processed. We have to do that incredibly
01:38:34 4 fast. The structures we build are almost incomprehensible
01:38:37 5 [sic] in some sense.

01:38:38 6 That means from a time a -- kind of a pixel kind
01:38:42 7 of comes into the monitor until it's on the screen is on
01:38:46 8 the order of like 100 nanoseconds. A nanosecond is one
01:38:53 9 billionth of a second, so incredibly, incredibly short
01:38:55 10 time. And that's why we build what we call pipelines.

01:38:58 11 You know, I talk to my students about a firehose.
01:39:01 12 You know, we have a firehose of data coming towards us.
01:39:06 13 It's on full blast. We got to get all that data and get it
01:39:10 14 onto the screen. And one of the most complex parts of
01:39:14 15 these systems is that timing in dealing with all that data.
01:39:18 16 So how we do that is incredibly complex and very -- and
01:39:21 17 very sensitive.

01:39:22 18 And so this idea that we're going to -- and
01:39:29 19 Dr. Ducharme explained it as we're going to take pixels in
01:39:33 20 the brain of the -- the display is going to put it in one
01:39:37 21 bucket and put some other in the other buckets, and that's
01:39:39 22 how he said identification was being done.

01:39:42 23 And then once the buckets are full, we're going to
01:39:44 24 process the data in one bucket and not process in the other
01:39:48 25 one. That just does not happen in these sorts of systems.

01:39:51 1 The firehose is on, the data is coming through, we build
01:39:56 2 these pipelines that can modify the data a little bit as
01:39:59 3 it's, you know, whizzing by us, but we don't build these
01:40:05 4 buckets that we've identified pixels and not identified
01:40:08 5 pixels.

01:40:08 6 He didn't really point to anything that did that.
01:40:11 7 He just kind of said that as an explanation. I don't
01:40:15 8 believe it happens.

01:40:15 9 Q. Okay. And you just testified that Dr. Ducharme didn't
01:40:28 10 explain how that would happen?

01:40:30 11 MR. LIDDLE: Objection, leading.

01:40:33 12 THE COURT: Sustained.

01:40:33 13 BY MR. JOSHI:

01:40:33 14 Q. Could you --

01:40:33 15 THE COURT: Can you rephrase the question?

01:40:36 16 MR. JOSHI: Sorry, Your Honor.

01:40:38 17 BY MR. JOSHI:

01:40:38 18 Q. Could you restate the flaw --

01:40:40 19 THE COURT: Rephrase the question.

01:40:43 20 BY MR. JOSHI:

01:40:43 21 Q. What was the flaw in Dr. Ducharme's presentation?

01:40:46 22 A. Well, he told us -- he told us about this brain, and I
01:40:50 23 know he was trying to use an analogy, and he was telling us
01:40:53 24 about how moving things into buckets, you know, analogy
01:40:53 25 kind of works.

01:40:53 1 You can't put a firehose -- you can't put a bucket
01:40:53 2 in front of a firehose and move things over and store them
01:41:04 3 for later. It just overflows the system; the video stops.

01:41:09 4 So that was -- you know, that's how he was trying
01:41:13 5 to explain it. The problem I had was he didn't turn around
01:41:16 6 and back it up with evidence. He didn't show us
01:41:19 7 anything -- didn't show me anything that showed these
01:41:22 8 buckets -- or how this bucket -- this idea of a bucket was
01:41:26 9 being implemented in the system. All -- he gave us a story
01:41:29 10 about buckets. Very little of it.

01:41:37 11 Q. So in conclusion, Dr. Stevenson, do you believe
01:41:42 12 the '435 patent is invalid?

01:41:44 13 A. I do believe it's invalid.

01:41:46 14 Q. And do you believe that ASUSTeK does not infringe
01:41:50 15 the '435 patent?

01:41:50 16 A. Correct. I believe it's doesn't infringe the '435.

01:41:53 17 Q. Thank you, Dr. Stevenson.

01:41:53 18 MR. JOSHI: We'll pass the witness, Your Honor.

01:41:57 19 THE COURT: Cross-examination?

01:42:00 20 CROSS-EXAMINATION

01:42:11 21 BY MR. LIDDLE:

01:42:34 22 Q. Good afternoon, Dr. Stevenson. My name is Bradley
01:42:37 23 Liddle. I'm an attorney with -- representing Lone Star
01:42:43 24 Technological Innovations in this case. It's nice to meet
01:42:46 25 you. I don't think we've ever met before.

01:42:48 1 A. Good afternoon. I don't believe we have either.

01:42:48 2 Q. Yes. Okay. Well --

01:42:51 3 A. It's nice to meet you.

01:42:52 4 Q. All right. I want to start -- you just testified

01:42:54 5 with -- about infringement, and I kind of want to start

01:42:56 6 there.

01:42:57 7 So the first thing I want to focus on is a
01:42:59 8 statement that you just made, while it's fresh in the mind
01:43:02 9 of the jury.

01:43:03 10 So something you just said was, in this
01:43:05 11 identification step, which is the -- how we identify the
01:43:11 12 pixels to be changed using arithmetic and logical
01:43:15 13 operations, you said that Dr. Ducharme didn't cite
01:43:18 14 anything, is that right, or didn't point to anything?

01:43:21 15 A. I didn't see him point to any evidence that it does
01:43:24 16 that, no.

01:43:25 17 Q. Do you remember Dr. Ducharme serving an expert report
01:43:28 18 in this case?

01:43:28 19 A. Yes.

01:43:28 20 Q. You do? Okay. So with his expert report, do you
01:43:33 21 remember that he reviewed the MediaTek source code?

01:43:42 22 A. I remember he served two expert reports on
01:43:46 23 infringement. In one, he did not. A later one, a
01:43:48 24 supplemental infringe report, he did --

01:43:48 25 Q. Okay.

01:43:51 1 A. -- talked about source code.

01:43:52 2 Q. All right. Well, let's just break that down. So -- so

01:43:57 3 Dr. Ducharme served an initial expert report, correct?

01:43:59 4 A. Yes.

01:44:00 5 Q. And then he reviewed the MediaTek source code, correct?

01:44:04 6 A. I don't know the order in which he did things.

01:44:08 7 Q. Okay. A reasonable inference would be that he did

01:44:12 8 these things in order, right?

01:44:13 9 A. I don't know. He served one expert report, then he

01:44:16 10 served a second one which included code analysis.

01:44:19 11 Q. But -- but the second -- the second infringement report

01:44:24 12 that he served contained MediaTek source code; is that

01:44:27 13 correct?

01:44:27 14 A. Yes.

01:44:28 15 Q. Okay. Under the identifying step, which is Claim 1(c),

01:44:34 16 did he put source code citations to show how the pixels are

01:44:39 17 identified?

01:44:40 18 A. No.

01:44:41 19 Q. He didn't?

01:44:42 20 A. No.

01:44:42 21 Q. Do you have a copy of his report? Let me -- let me --

01:44:54 22 let me clarify something real quick. Did you read

01:44:58 23 Dr. Ducharme's report?

01:44:59 24 A. Yes.

01:45:00 25 MR. JOSHI: If it helps, Counsel, it's the last

01:45:03 1 tab in his binder.

01:45:06 2 THE WITNESS: I do have a report -- I don't know
01:45:45 3 if it's the -- I believe I have the original report, not
01:45:49 4 the one with the source code.

01:45:51 5 BY MR. LIDDLE:

01:45:52 6 Q. Okay.

01:45:52 7 MR. JOSHI: You have it. It's the last one. It's
01:45:55 8 No. 5 in your binder.

01:45:58 9 A. I do have it.

01:45:58 10 BY MR. LIDDLE:

01:46:29 11 Q. Okay. Can you turn to Dr. Ducharme's supplemental
01:46:32 12 expert report on infringement, the one that contains the
01:46:34 13 MediaTek source code and review Paragraphs 67, 68, and 69
01:46:41 14 and 70.

01:46:57 15 A. Okay.

01:46:57 16 Q. Would you like to change your answer on whether he
01:47:01 17 cited source code to show this step?

01:47:04 18 A. To show the identification step?

01:47:07 19 Q. Yes. You made the statement he did not -- he did not
01:47:11 20 cite source code to show infringement of this step, and I
01:47:15 21 just pointed to you that he -- that he did. Would you like
01:47:18 22 to change your answer?

01:47:20 23 A. To be clear, I believe your question was whether or not
01:47:23 24 he showed source code to support his position that the
01:47:27 25 products did identification. He cites source code in this

01:47:32 1 section, but that source code does not show that it does
01:47:35 2 any identification.

01:47:39 3 Q. Okay. I'm looking at -- I'm looking at Paragraph 66.

01:48:34 4 Okay. Do you -- can you read that?

01:48:36 5 A. Yeah.

01:48:36 6 Q. And then I'm also looking at Paragraph 67. And so
01:48:40 7 Dr. Ducharme says: This includes a logical operation where
01:48:45 8 the values assigned to U out and V out are determined by a
01:48:49 9 set of logical and operations and logical comparison
01:48:53 10 operations.

01:48:54 11 Do you see that, sir?

01:48:55 12 A. Yes.

01:48:55 13 Q. Okay. Thank you.

01:48:59 14 I want to move on to something else that you said.
01:49:05 15 When you came down and were demonstrating the monitors, you
01:49:10 16 had made some -- you had submitted some testimony on delta
01:49:14 17 value.

01:49:15 18 A. Yes.

01:49:15 19 Q. So we -- we saw you go in and select R, G, and B, and
01:49:22 20 we saw the red, green, and blue slider that we've been
01:49:26 21 looking at through this trial.

01:49:28 22 A. The yes.

01:49:28 23 Q. And so -- and so why would the delta -- so -- so the
01:49:33 24 delta value in that case is 1, is it not?

01:49:36 25 A. It's 1? I don't know what you mean by that.

01:49:40 1 Q. So throughout the trial, we've had several -- we've had
01:49:45 2 opposing counsel, we've had experts come up and change the
01:49:49 3 R, G, and B slider, correct?

01:49:51 4 A. Yes.

01:49:51 5 Q. And it generally changes from 50 to 51 and then 51 to
01:49:57 6 52, correct?

01:49:57 7 A. I've seen most people change it bigger than that, but
01:50:01 8 they change it -- you know, 75, 100, or something like
01:50:03 9 that.

01:50:04 10 Q. But it's one at a time, right?

01:50:06 11 A. No, not one at a time. I don't recall anyone sliding
01:50:09 12 to 51 and then to 52. Just slid it --

01:50:15 13 Q. Okay. All right. I'd like to move on to -- okay.

01:50:37 14 Dr. Stevenson, how many times have you testified
01:50:40 15 in trial before?

01:50:42 16 A. In a District Court setting like this, I believe this
01:50:45 17 is my twelfth or thirteenth time, something like that.

01:50:50 18 Q. And how many times have you testified in a deposition?

01:50:56 19 A. I don't know. Maybe -- probably over 50 times.

01:51:01 20 Q. And how many times have you testified at, like, a
01:51:11 21 non-jury trial or an administrative hearing?

01:51:13 22 A. Probably the other place where I testify maybe the most
01:51:18 23 is at the -- what's called the International Trade
01:51:22 24 Commission. It's a branch of the U.S. government that
01:51:26 25 looks at trade -- international trade. And I've testified

01:51:30 1 there -- it's about another dozen times.

01:51:33 2 Q. Okay. But the International Trade, known as the ITC,
01:51:38 3 that deals with patent infringement, generally, right?

01:51:41 4 A. Yeah.

01:51:41 5 Q. Okay. And then how many times have you testified at a
01:51:45 6 claim construction hearing or -- or a deposition for claim
01:51:50 7 construction?

01:51:50 8 A. Well, at a hearing, I don't know, maybe -- I've been
01:52:01 9 doing this a long time. Maybe half a dozen times. You
01:52:05 10 know, in terms of depositions for claim construction, that
01:52:07 11 number I gave you before, 50, kind of included --

01:52:12 12 Q. Okay.

01:52:12 13 A. -- both those and others things. I don't know how to
01:52:16 14 break it out.

01:52:17 15 Q. So -- so -- so all together, maybe around 100 times
01:52:22 16 you've testified?

01:52:22 17 A. In deposition or trial?

01:52:24 18 Q. Yeah.

01:52:25 19 A. It might be that many. It's been close to 25 years
01:52:28 20 I've been doing this, so...

01:52:30 21 Q. All right. So -- so in these -- in this testimony, you
01:52:35 22 always represent the accused infringer of the patent,
01:52:40 23 right?

01:52:40 24 A. No, not at all.

01:52:41 25 Q. How many times have you represented, for instance, a

01:52:44 1 patent owner?

01:52:45 2 A. How many times have I represented the patent owner?

01:52:49 3 Q. Yeah. So there's -- on two sides, there's either the
01:52:52 4 patent owner or the accused infringer.

01:52:53 5 A. I haven't counted it up. I think of it as pretty even.
01:52:58 6 I do both.

01:52:58 7 Q. You do both? Can you name one such case where you
01:53:02 8 respect represented a patent owner?

01:53:05 9 A. Sure. I testified down in Beaumont, Texas, a couple of
01:53:07 10 years for a company called Cummins. They're -- they make
01:53:11 11 money machines. They make money counters, and they use
01:53:15 12 image processing to identify bills. And they were -- they
01:53:17 13 had a patent, and they asserted it against someone, and I
01:53:25 14 testified for them.

01:53:26 15 Q. Okay. Now, I want to go back to something and make it
01:53:28 16 clear. We were discussing the identification step in --
01:53:35 17 for infringement of the '435 patent, and we got out
01:53:38 18 Dr. Ducharme's supplemental expert report where he cited
01:53:43 19 the source code.

01:53:44 20 Now, you did not -- you did not review the source
01:53:47 21 code in this case, did you?

01:53:47 22 A. No, I reviewed the code.

01:53:50 23 Q. You reviewed the source code in this case?

01:53:52 24 A. Yes.

01:53:52 25 Q. Is there some reason why you didn't supplement your

01:53:57 1 report with the source code?

01:53:59 2 A. I wasn't asked to.

01:54:00 3 Q. Okay. So I want to talk about your testimony just now
01:54:36 4 on infringement. So Mr. Joshi did not go through all of
01:54:39 5 the claims of -- of the patent with you, right, in the
01:54:41 6 context of infringement?

01:54:42 7 A. No. He -- kind of leading up to it, he talked about
01:54:46 8 how if you don't infringe Claim 1 --

01:54:46 9 Q. Right.

01:54:49 10 A. -- you don't infringe the rest, but we didn't go
01:54:52 11 element by element through all the claims.

01:54:54 12 Q. So your opinion was only that 1(b) and 1(c) are not met
01:54:59 13 by the ASUS products, right?

01:55:00 14 A. Well, in terms of what I offered in the courtroom,
01:55:04 15 those are the only two I discussed.

01:55:05 16 Q. But you didn't offer any other testimony regarding
01:55:08 17 that; is that correct?

01:55:08 18 A. Correct. Those are the two elements I testified about
01:55:11 19 here today.

01:55:12 20 Q. Okay. So it would be fair to say if the jury disagreed
01:55:16 21 with you, they would find your -- the ASUS products are
01:55:20 22 infringed, right?

01:55:21 23 A. Well, they could also agree with the validity
01:55:25 24 positions, and then you can't infringe --

01:55:26 25 Q. Well, that wasn't my question. So my question was:

01:55:29 1 You only submitted testimony just now on Elements 1(b) and
01:55:33 2 1(c), and just so -- just a matter of logic, if the jury
01:55:40 3 disagrees with you, they would find that the ASUS monitors
01:55:44 4 infringe, right?

01:55:45 5 A. I think there's an element missing to your logic. They
01:55:48 6 could also find the patent invalid, and you can't infringe
01:55:52 7 an invalid patent.

01:55:53 8 Q. I wasn't talking about invalidity, but I think you
01:55:58 9 answered my question.

01:56:00 10 Now, in this -- in this matter we have been
01:56:10 11 discussing the ASUS accused products, right?

01:56:13 12 A. Yes.

01:56:14 13 Q. Now -- so there's been a lot of testimony on whether
01:56:26 14 you characterize the products into sort of 3-axis
01:56:30 15 and 6-axis. Do you agree with that?

01:56:32 16 A. That's how you guys have grouped the two set of
01:56:35 17 products, you might say.

01:56:36 18 Q. So in your expert report it says that you obtained and
01:56:39 19 tested two ASUS products, right?

01:56:41 20 A. Yes.

01:56:42 21 Q. Now, your -- now, your report doesn't set out the test
01:56:48 22 conditions or -- or anything like that with the -- how
01:56:53 23 those products were tested or anything of that nature,
01:56:56 24 correct?

01:56:56 25 A. I don't recall what discussion I had. Mostly what I

01:57:01 1 did was just use them to see what sort of features they had
01:57:05 2 and see what sort of capabilities they had.

01:57:07 3 Q. Okay. So that would be more like a demonstration, not
01:57:10 4 a test. Would you agree with that?

01:57:11 5 A. Well, I don't know what qualifies something as a test
01:57:15 6 versus a demonstration. I wanted to explore the
01:57:20 7 functionality of the product. You don't see everything in
01:57:22 8 the user manual, so I wanted copies of the products so I
01:57:26 9 could see what functionality they had.

01:57:28 10 Q. Okay. Let's explore the differences between a
01:57:32 11 demonstration and a test. I think that what we have seen
01:57:36 12 in this courtroom has been a demonstration of some of the
01:57:38 13 functionality of the product. Would you agree with that?

01:57:41 14 A. Yes, there's certainly been demonstrations of some of
01:57:43 15 the functionality.

01:57:43 16 Q. Okay. So -- so were you in the courtroom when
01:57:49 17 Dr. Ducharme testified about testing the products?

01:57:52 18 A. I assume you're talking about his test with the color
01:57:56 19 measurement?

01:57:56 20 Q. Right. So you would agree with me that that would be
01:57:59 21 more of a test and not a demonstration?

01:58:02 22 A. I wouldn't call that much of a test, but that's how he
01:58:08 23 called it.

01:58:14 24 Q. Okay. But I mean Dr. Ducharme did use a pretty
01:58:17 25 expensive color sensor, right, to -- to determine the

01:58:20 1 measurements when he changed the hue and the saturation to
01:58:23 2 show that the other colors didn't change, right?

01:58:28 3 A. He took a sensor, and he made some measurements. I
01:58:32 4 don't think they were particularly illustrative of
01:58:34 5 anything.

01:58:34 6 Q. I think he did more than that, right? So do you
01:58:38 7 agree --

01:58:38 8 A. I don't believe -- no, I disagree. He didn't do much
01:58:42 9 more than that, no.

01:58:50 10 Q. So just to confirm, you didn't use any kind of testing
01:58:54 11 equipment like Dr. Ducharme, correct?

01:58:55 12 A. Like I said, I don't believe his tests were
01:58:58 13 illustrative of anything.

01:58:59 14 Q. That wasn't my question, sir.

01:59:01 15 A. Okay. Well, I did not feel the need to do that sort of
01:59:01 16 test. I don't see that eliminated any issue in the case,
01:59:04 17 so I did not do that test.

01:59:05 18 Q. But you not use testing equipment, correct?

01:59:10 19 A. I don't see why you would use testing equipment in this
01:59:13 20 case, so, no, I did not do it.

01:59:13 21 MR. LIDDLE: Your Honor --

01:59:14 22 THE COURT: Let me instruct the witness. This
01:59:16 23 will go much more quickly if you'll just answer yes or no.
01:59:19 24 If you can't answer yes or no, explain that you can't and
01:59:22 25 he can ask you a different question if he wants to.

01:59:25 1 A. I did not do testing the way you're characterizing it.

01:59:45 2 BY MR. LIDDLE:

01:59:47 3 Q. Okay. So I want to look at your expert report -- your
01:59:49 4 rebuttal report on infringement.

01:59:49 5 Do you need a break, Dr. Stevenson?

01:59:51 6 A. No. I'm fine.

01:59:51 7 Q. Do you have that in your binder?

01:59:58 8 A. Infringement? Yes.

02:00:05 9 MR. JOSHI: It's under Tab 4.

02:00:07 10 THE WITNESS: I got it. Thank you.

02:00:10 11 BY MR. LIDDLE:

02:00:22 12 Q. All right. So as we've seen, Claim 1 is a method
02:00:26 13 claim, correct?

02:00:26 14 A. Correct.

02:00:27 15 Q. All right. So -- so the case is about ASUSTeK offering
02:00:36 16 a product that meets all of the elements of the claim but
02:00:40 17 requires a user to use the method to infringe, right?

02:00:45 18 A. Correct. You have to actually perform the steps so a
02:00:50 19 user is needed.

02:00:51 20 Q. Yeah. So we've heard testimony on, you know, how the
02:00:56 21 users are encouraged to use these steps. We've seen
02:01:01 22 advertisements. We've seen, you know, Plaintiff's
02:01:04 23 Exhibit 14 which shows the -- you know, basically here's
02:01:07 24 how -- here's how it works with 6-axis, you know,
02:01:10 25 independent color change. You agree with that, right?

02:01:13 1 We've seen some evidence of that?

02:01:16 2 A. Maybe remind me what Exhibit 14 is. I just don't
02:01:22 3 remember which one that is.

02:01:24 4 MR. LIDDLE: Denver, can you put you Plaintiff's
02:01:27 5 Exhibit 14, please?

02:01:40 6 A. Yes, I certainly recall seeing this before.

02:01:43 7 BY MR. LIDDLE:

02:01:44 8 Q. Okay. Just to break this down and make it really
02:01:47 9 clear, who are these end users of the method?

02:01:49 10 A. Who are what end users?

02:01:51 11 Q. I mean, who are -- just who are the end users
02:01:53 12 generally?

02:01:53 13 A. People who need a computer monitor.

02:01:55 14 Q. Right. So could it be somebody like me or you could be
02:01:59 15 an end user?

02:02:00 16 A. Sir, we own a lot of computer monitors.

02:02:04 17 Q. Right. Could it be somebody that lives in, say Tyler,
02:02:09 18 Texas?

02:02:09 19 A. Sure.

02:02:10 20 Q. People -- people sitting on the jury?

02:02:12 21 A. I imagine a lot of people have computer monitors. I
02:02:13 22 don't know how popular ASUS is, but I'm sure there's plenty
02:02:13 23 of computer monitors floating around.

02:02:16 24 Q. Right. So you gave an opinion on why color adjustment
02:02:20 25 wouldn't be performed by the end users. Do you remember

02:02:23 1 that?

02:02:23 2 A. Yes.

02:02:24 3 Q. Okay. So that's on Page 24 of your expert report?

02:02:35 4 A. Okay.

02:02:36 5 Q. All right. So you go through, and we have -- we have
02:02:37 6 sort of four reasons here why someone wouldn't -- wouldn't
02:02:41 7 necessarily perform this method. Would you mind reading
02:02:46 8 No. 4 for me real quick?

02:02:48 9 A. Where is No. 4?

02:02:50 10 Q. At the very -- very bottom of Paragraph 84?

02:02:53 11 A. Paragraph 84.

02:02:55 12 Q. Page 24.

02:03:01 13 A. Okay.

02:03:02 14 Q. Can you read that out loud for us, please?

02:03:05 15 A. Sure.

02:03:07 16 (As read): Almost all -- almost all end users'
02:03:10 17 monitors and projectors are not sophisticated enough with
02:03:14 18 respect to color calibration to make such an adjustment or
02:03:18 19 even determine if such an adjustment is needed.

02:03:23 20 Q. So your testimony as to why someone wouldn't use this
02:03:27 21 is they're not sophisticated enough to figure it out or
02:03:31 22 even know that it needs to be done?

02:03:33 23 A. For these sort of controls for this idea of color
02:03:37 24 calibration, I would not even know how to use it to do
02:03:40 25 color calibration.

02:03:41 1 So I include myself in those unsophisticated
02:03:45 2 users. You would not use these controls for color
02:03:49 3 calibration, which is basically the position that
02:03:51 4 Dr. Ducharme has taken.

02:03:54 5 Q. Okay. I want to switch gears to the invalidity side.

02:04:21 6 MR. LIDDLE: Denver, can you put on Plaintiff's --
02:04:26 7 I mean, I'm sorry, Defense Exhibit 9, please, the Brett
02:04:30 8 reference? And would you mind zooming in on the figure at
02:04:51 9 the bottom, please?

02:04:53 10 BY MR. LIDDLE:

02:05:10 11 Q. Okay. Dr. Stevenson, so this is a figure from the
02:05:14 12 Brett reference, which your -- your testimony is
02:05:20 13 anticipates the '435 and somehow renders it invalid, right?

02:05:26 14 A. Correct.

02:05:26 15 Q. Okay. So I like this picture, and I like it because it
02:05:29 16 sort of breaks down how pixels come in -- colors come in
02:05:34 17 and are adjusted according to Brett. Would you agree with
02:05:38 18 that?

02:05:38 19 A. It's an overview of the system so you can see pieces of
02:05:42 20 all the parts on the system in this picture.

02:05:45 21 Q. Right. So I want to walk through this a little bit,
02:05:48 22 so -- so bear with me.

02:05:50 23 So would you agree that when you see the input on
02:05:57 24 the very left-hand side, that's where the signal comes in
02:06:01 25 to the system?

02:06:02 1 A. That's the video input signal, yes.

02:06:06 2 Q. Video input signal. By the way, where would this be
02:06:11 3 located? This -- this is a -- it's a -- it's an image
02:06:16 4 control system. Where would that be located?

02:06:21 5 A. I'm not sure I follow you.

02:06:24 6 Q. So this would not be located, like, on the monitor,
02:06:27 7 right?

02:06:27 8 A. You can put this functionality on the monitor.

02:06:31 9 Q. But that's not what Brett describes, is it?

02:06:36 10 A. I don't remember -- well, Brett describes a number of
02:06:40 11 embodiments. They do talk about connecting to a display.
02:06:45 12 I don't know if they talk about putting it inside the
02:06:47 13 display or not.

02:06:48 14 Q. Well, so -- but -- but you don't know if Brett actually
02:06:51 15 talks about putting this inside of a display, right?

02:06:55 16 A. There was no requirement in the claims to put it inside
02:06:58 17 the display, so I do did not look into Brett for that
02:06:58 18 issue.

02:07:03 19 Q. Okay. But, in reality, this is -- in the Brett
02:07:05 20 reference, this is more like in a control room. I mean,
02:07:07 21 we're talking about pretty old technology. We're at
02:07:13 22 telecine. We're doing -- you know, we're doing movie film
02:07:15 23 conversion. This is more like -- at that time, it was more
02:07:19 24 of a room. Do you agree with that?

02:07:20 25 A. This is a piece of -- at the end of the day, something

02:07:22 1 like Figure 4A and B is a piece of hardware that can be
02:07:27 2 these days very small. So I could use the teachings of
02:07:30 3 Brett to put it into a lot of different products. And so
02:07:34 4 what we're interested in is what does Brett teach us, not
02:07:38 5 all the specific embodiments disclosed in Brett.

02:07:41 6 Q. Okay. Well, let's go through it. So we just -- we
02:07:45 7 just talked about the input signal coming in, correct?

02:07:49 8 A. Yes.

02:07:49 9 Q. Okay. And then to me, it looks like the signal comes
02:07:53 10 in to be input, deco -- decode, demultiplex. Is that
02:08:00 11 right?

02:08:00 12 A. That's the first -- name of the first block.

02:08:03 13 Q. Right. And then it seems like the signal is then
02:08:07 14 converted into YUV, which is a color space, right?

02:08:11 15 A. Yes.

02:08:12 16 Q. Okay. But then what I see happening is for -- for --
02:08:19 17 so does the entire signal come into this area, come in
02:08:25 18 through this input?

02:08:26 19 A. The entire -- as I mentioned, it's the video pipeline.
02:08:29 20 So the entire video signal is going to flow through this
02:08:35 21 data, kind of piece by piece.

02:08:36 22 Q. Okay. So if the entire video comes in and it's then
02:08:40 23 characterized into a YUV color space, is that -- is that
02:08:47 24 the entire signal that's characterized there in the
02:08:50 25 pipeline?

02:08:50 1 A. I mean, I just want to be careful about when you say,
02:08:53 2 an entire.

02:08:54 3 This is -- data is coming in what we call
02:08:56 4 serially. It's coming in in a stream. And so you don't
02:09:00 5 ever have the entire video at the same time. You have a
02:09:02 6 piece of it at any time you're operating on it. That's why
02:09:05 7 we talk about a pipeline. Think about the water flowing
02:09:08 8 through a pipeline. You have some of the water there, but
02:09:11 9 you don't have it all. And so you're operating on that
02:09:13 10 piece. So at any moment, there's some pixel data
02:09:17 11 represented in YUV space and that -- that's part of the
02:09:21 12 circuit.

02:09:21 13 Q. Okay. But the part of the data coming in -- the part
02:09:31 14 of the data that you're talking about all flows through
02:09:34 15 that first -- first step there; is that correct?

02:09:36 16 A. If you look over time, all the data will go through
02:09:40 17 that first step, if that's what you're getting at.

02:09:43 18 Q. That is what I'm getting at. Thank you.

02:09:45 19 So if it all goes through and it's converted to
02:09:50 20 YUV, do you see the next part that says, master saturation
02:09:54 21 control?

02:09:54 22 A. Yes.

02:09:54 23 Q. So then the U and V components are then -- have some
02:09:57 24 kind of master saturation applied to them; would you agree
02:10:00 25 with that?

02:10:00 1 A. Yes. Brett describes global saturation that you could
02:10:04 2 add shown in that block that you just highlighted.

02:10:07 3 Q. Okay. But the '435 patent that you're trying to
02:10:10 4 invalidate with Brett is independently controlling
02:10:15 5 saturation for an individual color, not a master saturation
02:10:20 6 control, correct?

02:10:21 7 A. Right. But that's why I wouldn't point to that as part
02:10:24 8 of the invalidating teaching.

02:10:26 9 Q. Okay. Well, let's keep going.

02:10:29 10 So then after -- after it has gone through the
02:10:32 11 master saturation control, so it's likely that there's been
02:10:37 12 some color change already, correct?

02:10:39 13 A. It's possible. It's the same sort of stuff in the
02:10:44 14 accused products. So I'm not sure what your point is.

02:10:46 15 Q. That wasn't my question. We're talking about the Brett
02:10:46 16 reference.

02:10:50 17 And my point is, is that the saturation has
02:10:53 18 changed for the U and V component before we even get to the
02:10:56 19 steps that you're talking about, right?

02:10:58 20 A. If a user selected to change the global saturation, it
02:11:01 21 would be changed at that point.

02:11:08 22 Q. Okay. So then my understanding of what happened next
02:11:11 23 is it's then converted again from YUV to RGB. Do you agree
02:11:19 24 with that?

02:11:20 25 A. Yes, that's what that digital matrix box, No. 2, is

02:11:24 1 doing.

02:11:25 2 Q. Okay. So unlike the '435 patent, though, once these
02:11:30 3 things are converted, they go into different -- different
02:11:33 4 pipelines, correct?

02:11:36 5 A. I'm not sure what you're getting at.

02:11:38 6 Q. Well, I'm getting at the highlighted red section where
02:11:43 7 we have RGB. So there's a top pipeline where the colors
02:11:49 8 are -- are not going to be -- H, S and L are not going to
02:11:55 9 be modified. And then we have this secondary -- you have
02:12:06 10 this secondary pipeline at the bottom for modification,
02:12:09 11 conversion to HSL and then color modification, right?

02:12:13 12 A. No, I wouldn't agree with that -- the way you
02:12:16 13 characterized it, sir.

02:12:18 14 THE COURT: Dr. Stevenson, can I ask you to speak
02:12:20 15 up? This court reporter is having a hard time hearing you.

02:12:24 16 THE WITNESS: Sorry.

02:12:24 17 THE COURT: Just raise -- raise your volume,
02:12:26 18 please.

02:12:26 19 THE WITNESS: I'll try.

02:12:49 20 BY MR. LIDDLE:

02:12:50 21 Q. I want to read to you from Column 9 of the Brett
02:12:53 22 reference.

02:12:59 23 So Column 9, do you see at Line 35, says: The
02:13:03 24 primary signal path starts with the inputting of RGB
02:13:07 25 digital signals at an input.

02:13:08 1 So we just went over that, correct?

02:13:10 2 A. Yes.

02:13:11 3 Q. It says: Which may be a respective 10-bit RGB output
02:13:25 4 signals from a telecine, DTR, or any other digital video
02:13:28 5 signal.

02:13:29 6 Do you see where it says that?

02:13:31 7 A. Yes.

02:13:31 8 Q. Okay. Let's come back to that in a minute.

02:13:41 9 So then farther down on that same column, do you
02:13:45 10 see Column 9, Line 46? Do you see -- do you see that?

02:13:57 11 A. Yes.

02:13:59 12 Q. And then further down, Column 9, Lines 57 says: The R,
02:14:17 13 G, and B signals are then provided to respective primary
02:14:22 14 LUTs.

02:14:24 15 Now, what's a LUT, Dr. Stevenson?

02:14:27 16 A. Shorthand for look-up table.

02:14:30 17 Q. Look-up table.

02:14:32 18 Okay. Now, I want to switch back to -- now I want
02:14:35 19 to go to Column 10, starting at Line 46. Do you see that,
02:14:46 20 Dr. Stevenson?

02:14:47 21 A. Yes.

02:14:47 22 Q. It says: At Point B, after processing by the primary
02:14:51 23 lookup tables 3, all of the corrected R, G, and B signals,
02:14:56 24 including those that are not to be modified, are provided,
02:15:01 25 possibly downsampled, to the secondary signal path.

02:15:06 1 Do you see that?

02:15:06 2 A. Yes.

02:15:07 3 Q. Okay. Then it goes on to say: If the primary signal
02:15:10 4 path is high-definition, then it is advantageous, as
02:15:14 5 discussed above, for the modification path to be standard
02:15:18 6 definition.

02:15:19 7 Do you see that?

02:15:19 8 A. Yes.

02:15:20 9 Q. So this sort of implies that there's a primary path and
02:15:24 10 a secondary path, right?

02:15:25 11 A. There are multiple paths, if that's what you mean. But
02:15:29 12 both of them eventually are going to be changing hue and
02:15:33 13 saturation. That's one characterization I didn't agree
02:15:36 14 with you on.

02:15:43 15 Q. Okay. Well, let's talk about that, too. So also in
02:15:47 16 Column 10 where we say -- I'm on Column 10, Line 52:
02:16:00 17 Therefore, the HD image is sub-sampled down at Point B and
02:16:07 18 is interpolated up at Point C.

02:16:09 19 Right?

02:16:09 20 A. Yes.

02:16:10 21 Q. So that, to me -- so I guess help me out. You're
02:16:16 22 saying that all -- the entire signal goes to the primary
02:16:20 23 path, which I think is the top path in the figure --

02:16:25 24 MR. LIDDLE: Denver, can you highlight the main
02:16:27 25 figure?

02:16:27 1 BY MR. LIDDLE.

02:16:30 2 Q. -- but the top path -- you see those lines that are
02:16:37 3 going RGB through the system. That's the primary path.
02:16:40 4 Would you agree with that?

02:16:41 5 A. Yes.

02:16:42 6 Q. Does some of the signal just travel through the primary
02:16:45 7 path?

02:16:45 8 A. The entire signal does.

02:16:47 9 Q. The entire signal does?

02:16:49 10 A. Yes.

02:16:49 11 Q. So some of -- so some of the signal is then downsampled
02:16:54 12 to the secondary path; is that correct?

02:16:59 13 A. Not quite. If you have a high-definition signal or one
02:17:03 14 of these non-real time signals, yes. If you're talking
02:17:06 15 about the standard definition, there's no downsampling.
02:17:09 16 But the entire signal will also be repeated on the
02:17:13 17 secondary path. Now in the hue, saturation, luminance
02:17:18 18 color spaces instead of RGB.

02:17:20 19 Q. Okay. Can you repeat that part about the non-real time
02:17:23 20 images?

02:17:25 21 A. Well --

02:17:27 22 Q. Those -- those are -- you're saying those are not
02:17:29 23 downsampled to the secondary path?

02:17:31 24 A. No. I think you got that backwards. So as we talked
02:17:35 25 about, Brett discloses real time and non-real time modes of

02:17:42 1 operation. Basically at this time frame when you did very
02:17:46 2 high-definition, like IMAX movies, you couldn't make this
02:17:51 3 thing work in real time. To make it work in a reasonable
02:17:53 4 time frame, they had the primary path and they downsampled
02:17:56 5 into the secondary path.

02:17:57 6 But it worked fine in real time, as discussed in
02:18:01 7 patent as one of the modes, to do a standard definition
02:18:05 8 signal in real time. And their entire signal will go
02:18:08 9 through the primary path. And the entire signal without
02:18:13 10 the downsampling would go through the secondary path.

02:18:16 11 Q. Okay. So it's your testimony that the real time video
02:18:20 12 just goes through the primary path?

02:18:29 13 A. In real time, the entire video will go through both
02:18:34 14 paths, one in RGB format and one in HSL format.

02:18:37 15 Q. Okay. Now, when you get to the secondary path, we've
02:18:40 16 already converted from YUV to RGB, and now we're converting
02:18:45 17 again to HSL, correct?

02:18:47 18 A. Yes.

02:18:48 19 Q. Okay. Were you in the courtroom when Dr. Stevenson --
02:18:51 20 or Dr. Ducharme was testifying about converting from RGB to
02:18:54 21 HSL?

02:18:54 22 A. Yes.

02:18:55 23 Q. Okay. So Dr. Ducharme -- his analysis showed that when
02:19:00 24 you convert from RGB to HSL, that -- and then you try to
02:19:04 25 change hue or saturation, individual colors -- multiple

02:19:14 1 individual colors change their value. Did you see that?

02:19:16 2 A. I don't think you're characterizing his testimony
02:19:20 3 correctly.

02:19:20 4 Q. Did you do any conversion like that? Did you test that
02:19:24 5 concept?

02:19:24 6 A. There was no testing. It was an analysis.

02:19:24 7 Q. Right.

02:19:27 8 A. I repeated the analysis. I don't think you
02:19:30 9 characterized his analysis correctly, and I don't think his
02:19:33 10 analysis was all that relevant.

02:19:34 11 Q. Now, did you do that similar analysis?

02:19:36 12 A. I looked at what he did. I understood what he was
02:19:39 13 saying. I disagreed with the relevance of it, and I don't
02:19:43 14 see what the point was.

02:19:44 15 Q. But you didn't do that analysis, did you?

02:19:46 16 A. I did the analysis. That's when I said I looked at it.
02:19:50 17 I did the analysis. There was nothing to do other than
02:19:53 18 look at it and understand what he was saying.

02:19:56 19 Q. I want to now turn to the -- your assertion on the
02:20:03 20 double patenting. Dr. Stevenson, can you have the '435
02:20:33 21 patent ready for me, please?

02:20:35 22 MR. LIDDLE: Can you bring up Plaintiff's
02:20:37 23 Exhibit 1, Denver?

02:20:39 24 BY MR. LIDDLE:

02:20:48 25 Q. Dr. Stevenson, were you -- were you in the courtroom on

02:20:50 1 Monday when ASUS's counsel gave its opening statement?

02:20:54 2 A. Yes.

02:20:54 3 Q. Okay. So I've -- I've copied that down, and I'm going
02:20:58 4 to read that to you.

02:20:59 5 ASUS's counsel testified: Double patenting is a
02:21:02 6 concept that basically is when somebody tries to cheat on
02:21:06 7 the Patent Office a little bit. The U.S. government says
02:21:09 8 you file a patent application, you get 20 years of
02:21:14 9 exclusivity. Sometimes what people do is a couple of years
02:21:17 10 later, they file another patent application and then try to
02:21:20 11 get another patent on the same thing.

02:21:22 12 Now, I want you to -- were you there? Did you
02:21:25 13 hear -- did you hear that statement?

02:21:26 14 A. I don't remember word for word, but I remember that
02:21:29 15 concept being discussed.

02:21:31 16 Q. But you have no reason to disagree with --

02:21:35 17 A. If you're reading from the transcript, I believe you.

02:21:36 18 Q. So I'd like you to look -- this is Plaintiff's
02:21:40 19 Exhibit 1, the '435 patent, correct?

02:21:41 20 A. Yes.

02:21:41 21 Q. Okay. So I wrote down something you said earlier when
02:21:52 22 you testified about this, when you testified about
02:21:55 23 invalidity generally, and you said the Patent Office, you
02:21:58 24 know, really -- really didn't have all the information. Is
02:22:00 25 that your testimony?

02:22:01 1 A. I believe I said something like that, yes.

02:22:02 2 Q. You said that the Patent Office didn't have all the
02:22:05 3 information that you do, correct?

02:22:06 4 A. I think I said something like that, correct.

02:22:08 5 Q. Okay. So I want to point to -- so in your -- in the
02:22:14 6 double patenting, just to be clear, the defense is that the
02:22:19 7 '012 patent, which is also owned by Lone Star, it's obvious
02:22:28 8 to have -- it's a double patenting obviousness challenge,
02:22:33 9 right?

02:22:33 10 A. I think there's parts of -- claims that are obvious,
02:22:36 11 and parts of claims that were anticipated.

02:22:39 12 Q. All right. So can you look at -- can you -- let's
02:22:48 13 see --

02:22:49 14 MR. LIDDLE: Denver, can you highlight where it
02:22:52 15 says the '012 patent and maybe scroll down just a little
02:22:56 16 bit? Kind of in the top right-hand corner, 6,122,012.

02:23:05 17 BY MR. LIDDLE:

02:23:06 18 Q. Okay. So this is the '012 patent that we've been
02:23:10 19 discussing, right?

02:23:10 20 A. Yes.

02:23:11 21 Q. Do you see it on the face of the patent?

02:23:12 22 A. Correct.

02:23:13 23 Q. Okay. So your testimony that the Patent Office did not
02:23:17 24 have all the information, that doesn't really apply to the
02:23:22 25 '012 patent, does it?

02:23:23 1 A. No. I disagree with your characterization.

02:23:25 2 Q. Well, the Patent Office knew about the '012 patent when
02:23:28 3 it issued the '435, correct?

02:23:30 4 A. They knew about it, yes.

02:23:33 5 MR. LIDDLE: Can you -- can you scroll down to the
02:23:38 6 second page, please? Okay. Can you go to Column 2? I
02:23:57 7 think it's line -- I think it's Line 10. Can you zoom in
02:24:00 8 on that, please?

02:24:07 9 BY MR. LIDDLE:

02:24:08 10 Q. Okay. So this is on the second page of the '435
02:24:10 11 patent. Do you see that?

02:24:10 12 A. Yes.

02:24:11 13 Q. So in the actual specification where the patentee
02:24:15 14 describes the patent, they -- they list the '012 patent,
02:24:19 15 correct?

02:24:19 16 A. Yes. I believe you will find two or three paragraphs
02:24:22 17 where they discuss the '012.

02:24:26 18 Q. Okay. Now, Dr. Stevenson, when were you retained in
02:24:33 19 this matter?

02:24:33 20 A. I think it was maybe over a year ago. I don't recall
02:24:38 21 exactly.

02:24:38 22 Q. Okay. And what is -- what is your hourly rate? What
02:24:42 23 is your -- what do you get paid to testify?

02:24:44 24 A. Well, my work in this case here is \$600 an hour.

02:24:48 25 Q. You said \$600 an hour?

02:24:51 1 A. Yes.

02:24:51 2 Q. So you're paid \$600 an hour for your testimony; is that
02:24:54 3 right?

02:24:54 4 A. I'm not paid for my testimony. I'm paid for my time.

02:24:57 5 Q. Okay. And about how many hours have you put into this
02:25:01 6 case?

02:25:01 7 A. I don't know. It's been much less than many cases I've
02:25:08 8 worked on. Maybe a hundred hours. I'm not sure.

02:25:11 9 Q. A hundred hours? Okay.

02:25:14 10 MR. LIDDLE: Pass the witness.

02:25:15 11 THE COURT: Redirect?

02:25:19 12 MR. JOSHI: No redirect, Your Honor.

02:25:22 13 THE COURT: Very well. Call your next witness.

02:25:28 14 MR. OLIVER: Defense calls Brett Reed.

02:25:40 15 THE COURT: All right.

02:25:50 16 (Witness sworn.)

02:26:05 17 MR. OLIVER: Your Honor, I have a binder of expert
02:26:08 18 reports for the witness. May I approach and hand it to
02:26:10 19 him?

02:26:10 20 THE COURT: Of course, yes.

02:26:28 21 BRETT REED, DEFENDANT'S WITNESS, SWORN

02:26:28 22 DIRECT EXAMINATION

02:26:30 23 BY MR. OLIVER:

02:26:32 24 Q. Mr. Reed, good afternoon. Would you please introduce
02:26:34 25 yourself to the jury?

02:26:35 1 A. Yes. Good afternoon. My name is Brett Reed. I'm an
02:26:39 2 economist. I live and work near Pasadena, California. I
02:26:46 3 have four grandchildren.

02:26:46 4 Q. Did you prepare some demonstratives for your testimony
02:26:48 5 today?

02:26:48 6 A. Yes, I did.

02:26:49 7 Q. Okay. I would like to pull up the first slide for you.

02:27:03 8 Can you describe your background and your
02:27:05 9 experience for us?

02:27:07 10 A. Sure. I -- I went to college in basically the
02:27:12 11 economics program, so I got a bachelor's in economics and
02:27:18 12 geography from the University of California at Irvine. And
02:27:22 13 then I went to the graduate program in economics at UCLA.
02:27:23 14 I got a master's degree there, and I served as a teaching
02:27:28 15 assistant for several years. After that, I began working
02:27:31 16 in my current field, which is about 36 years ago, where I
02:27:35 17 performed as a economic consultant. And from the very
02:27:40 18 beginning, got involved in working on patent infringement
02:27:42 19 matters like this. And it's been the primary part of my
02:27:45 20 work, other than administrative and management type --

02:27:50 21 THE COURT: So we're losing sound. I'm not sure
02:27:54 22 if it's because you're turning or there's something wrong
02:27:56 23 with the mic.

02:27:56 24 THE WITNESS: Is this better?

02:27:58 25 THE COURT: Maybe move the mic away and give him

02:28:01 1 the lapel mic, if he could just hold that.

02:28:10 2 If you will press it one time, the green light
02:28:13 3 will come on.

02:28:14 4 THE WITNESS: Is this better?

02:28:16 5 THE COURT: Much better. Thank you.

02:28:20 6 A. So think I was into the -- my -- my work as an economic
02:28:24 7 consultant when I was focusing on patent infringement
02:28:29 8 damages matters. That's what I've been doing for most of
02:28:33 9 the last 36 years. And for the last 12 years at the firm
02:28:39 10 that's identified here, Competition Economics. It's a firm
02:28:41 11 I cofounded with five other people, including a professor
02:28:45 12 of economics from the University of Texas.

02:28:53 13 MR. OLIVER: Seems like we lost the display for
02:28:56 14 the jury. All right.

02:29:02 15 BY MR. OLIVER:

02:29:03 16 Q. What other -- do you have any other types of
02:29:06 17 responsibilities at Competition Economics?

02:29:08 18 A. Yes. I -- I manage the firm, so I deal with all the
02:29:12 19 financial issues. I also deal with training of employees.
02:29:19 20 And then I'm in charge of the -- the intellectual property
02:29:23 21 practice which includes dealing with patent matters like
02:29:28 22 infringement matters in U.S. District Court, as well as at
02:29:31 23 the United States International Trade Commission, the ITC,
02:29:38 24 that Professor Stevenson talked about just a little while
02:29:43 25 ago.

02:29:43 1 Q. And I notice at the bottom of your slide you have this
02:29:53 2 IAM Patent 1000 Leading Patent Expert Witness. What does
02:29:55 3 that refer to?

02:29:56 4 A. That refers to a firm called -- that produces something
02:29:56 5 called the Intellectual Asset Management or IAM Patent
02:30:04 6 1000. And in about 2013, they started including in this
02:30:07 7 study that they perform of practitioners in the area of
02:30:15 8 patent issues. They started including people who work like
02:30:17 9 I do in patent infringement damages matters. And from 2014
02:30:20 10 to 20 -- well, present, I've been included in these annual
02:30:24 11 reviews of leading patent infringement damages experts.

02:30:27 12 Q. Let me move to your next slide. Can you describe to us
02:30:31 13 what this slide shows?

02:30:33 14 A. Yes. This slide shows the seals of the various United
02:30:40 15 States District Courts and the U.S. International Trade
02:30:42 16 Commission where I have provided testimony on issues
02:30:44 17 relating to economics and patent infringement matters.

02:30:48 18 Q. And I see on the top left, you have a handful of cities
02:30:53 19 in the Eastern District of Texas mentioned?

02:30:58 20 A. Yeah. So the U.S. District Court for the Eastern
02:31:00 21 District of Texas has courtrooms in several cities. I've
02:31:05 22 testified several times before on patent infringement
02:31:07 23 damages in this courthouse. I've also testified five, six
02:31:12 24 times down the road in Marshal and once in Beaumont, Texas,
02:31:18 25 as well.

02:31:18 1 Q. And what types of cases have you worked on that led to
02:31:22 2 the testimony in these federal courts?

02:31:24 3 A. Well, U.S. District Courts deal with patent
02:31:28 4 infringement matters, so every time anybody testifies on a
02:31:31 5 patent infringement matter, it would be before a judge in
02:31:37 6 the U.S. District Court. Some of these cases would also
02:31:39 7 involve other IP matters, like trade secret. So that's
02:31:49 8 another form of intellectual property that sometimes is
02:31:52 9 disputed about, infringement issues and damages.

02:31:55 10 And then the ITC relates patents, but it's not
02:31:58 11 damages. It's about a patent owner seeking to exclude a
02:32:02 12 foreign company from bringing product into the United
02:32:05 13 States because of patent infringement. I perform economic
02:32:09 14 analysis that relates to that.

02:32:10 15 Q. And have you testified in courts that aren't federal
02:32:14 16 courts or other types of proceedings?

02:32:16 17 A. I have, but because of my focus on patent infringement
02:32:19 18 damages issues, most of my testimony is in U.S. District
02:32:27 19 Court.

02:32:27 20 Q. Is all of your work testifying?

02:32:29 21 A. No. In fact, it's a small part of my ultimate work
02:32:32 22 because most of my work relates to research and analysis,
02:32:36 23 preparing reports. So in the 36 years that I've been --
02:32:40 24 been involved in my profession, I've testified in ITC and
02:32:44 25 U.S. District Court cases about 30 times.

02:32:47 1 Q. And I'm going to move to your third slide, and in
02:32:52 2 conjunction with your third slide, can you give us a little
02:32:55 3 bit of description of some of the clients that you have
02:32:57 4 worked for in these matters?

02:32:59 5 A. Absolutely. So this gives an example of the clients
02:33:03 6 that I've worked with. Principally, I'm working with the
02:33:07 7 attorneys representing these clients, but also would
02:33:10 8 interact with employees and executives at these companies.
02:33:14 9 And all of these relate to patent dispute matters, so I
02:33:18 10 limit it to patent infringement matters. And, of course,
02:33:21 11 you can see Dell from Austin -- the Austin area, Vizio,
02:33:28 12 General Electric, Ford, Motorola, and, in particular, I was
02:33:32 13 working with Motorola and a group called Freescale, which
02:33:39 14 makes semiconductor chips and they were out of Austin,
02:33:41 15 Texas. Baker Hughes is another example.

02:33:44 16 Q. And who have you worked for on cases related to
02:33:47 17 displays, monitors, TVs, that type of work?

02:33:51 18 A. Quite a few, and some of them are identified here,
02:33:55 19 Sony, LG, Panasonic, Visio -- well, Dell, and even Jaguar
02:34:04 20 and Land Rover had to do with a display on the dashboard of
02:34:06 21 the Jaguar.

02:34:06 22 Q. And I think you told me at one point that you had
02:34:10 23 worked -- done some work on a case related to MediaTek; is
02:34:13 24 that correct?

02:34:13 25 A. Excuse me. Actually two cases. So when -- I did a

02:34:17 1 couple projects with Panasonic, and one of them was
02:34:22 2 Panasonic against MediaTek and it had to do with chip sets.
02:34:26 3 And one of the matters I did with Motorola and Freescale
02:34:31 4 also had to do with MediaTek and chip sets.

02:34:36 5 Q. What is your training and experience that's most
02:34:40 6 relevant to the work you've done on this case?

02:34:42 7 A. Well, it's the training as an economist, the experience
02:34:45 8 working in this area, interacting with -- with the issues
02:34:48 9 on a day-to-day basis. And so those are the principal
02:34:56 10 bases for my expertise.

02:34:59 11 Q. And over those 36 years, how many -- I think you
02:35:07 12 said 36 years, correct me if I'm wrong. But how many
02:35:09 13 patent cases have you worked on as an economic expert?

02:35:13 14 A. As an expert where I would issue the expert report in
02:35:16 15 patent infringement matters, it's more than 150 matters.

02:35:19 16 Q. And do you always work for the Defendants?

02:35:21 17 A. No. I have worked on -- with both the patent owner,
02:35:26 18 including the case here in this courthouse, so that was
02:35:32 19 adverse to Microsoft.

02:35:33 20 And in some cases, like, for example, Panasonic,
02:35:38 21 one of the Panasonic matters was Panasonic against Samsung.
02:35:43 22 And Panasonic asserted patents against Samsung, and Samsung
02:35:48 23 asserted patents against Panasonic in the same matter, and
02:35:52 24 I was working for Panasonic both as patent owner and as a
02:35:56 25 defender of infringement claims.

02:35:57 1 MR. OLIVER: Your Honor, I'd like to offer
02:35:58 2 Mr. Reed as an expert witness to offer opinion testimony on
02:36:01 3 patent infringement damages.

02:36:01 4 THE COURT: Any objection?

02:36:03 5 MR. LIDDLE: No, Your Honor.

02:36:05 6 THE COURT: Very well.

02:36:07 7 BY MR. OLIVER:

02:36:09 8 Q. Mr. Reed, what was your assignment for this case?

02:36:11 9 A. Well, my assignment in this case was to analyze the
02:36:13 10 work of Mr. Perdue and if appropriate to make corrections
02:36:17 11 to his analysis.

02:36:18 12 So here I was streamlining what I was doing by
02:36:21 13 focusing on major errors of Mr. Perdue and then addressing
02:36:30 14 those errors.

02:36:30 15 Q. And in some cases, you might do your own entirely new
02:36:34 16 hypothetical negot -- hypothetical negotiation analysis; is
02:36:38 17 that right?

02:36:38 18 A. Well, the hypothetical negotiation analysis is part of
02:36:40 19 what you heard about Georgia-Pacific where we analyze
02:36:44 20 these 15 factors. And so certainly when I'm working with
02:36:48 21 the patent owner, I've got to go through all the analysis
02:36:51 22 in a lot of detail.

02:36:54 23 On the -- in cases where I'm working with an
02:36:56 24 alleged infringer, I may also go through all of those
02:37:00 25 issues. Here, I focused on the critique of Mr. Perdue's

02:37:04 1 work.

02:37:05 2 Q. What type of documents and materials did you analyze
02:37:10 3 when you were coming to your opinion in this case?

02:37:11 4 A. I considered all the documents that Mr. Perdue had, but
02:37:17 5 then some additional ones, as well, including more detail
02:37:23 6 on the Philips licensing program he talked about, and I'll
02:37:27 7 get into more of that later, including information about
02:37:30 8 some of the license agreements that he analyzed and
02:37:32 9 included.

02:37:33 10 I also considered information about -- from the
02:37:38 11 web and from user manuals of not only ASUS monitors but
02:37:42 12 also Acer monitors.

02:37:45 13 And then, finally, I had conversations with
02:37:48 14 Professor Stevenson about some of the particulars focused
02:37:53 15 on my critique of Mr. Perdue.

02:37:55 16 Q. And do you agree with the methodology that Mr. Perdue
02:37:59 17 used?

02:38:00 18 A. No, I don't. I would never use an approach like
02:38:05 19 Mr. Perdue used, but for -- in streamlined purposes, it
02:38:11 20 made sense to show what happens to his calculations if you
02:38:14 21 make corrections that are consistent with his own approach
02:38:17 22 and his own supporting material.

02:38:19 23 Q. Okay. And so if someone is using his methodology,
02:38:25 24 it -- are you -- are you just applying some analysis in
02:38:29 25 terms of how it could be corrected?

02:38:35 1 A. Yes. So, again, based on his approach and the inputs
02:38:39 2 that he used, what I'll be doing is demonstrating what
02:38:43 3 happens if -- you know, the minimum corrections that need
02:38:46 4 to be made based on his own approach and his own inputs and
02:38:51 5 what happens to the damages under those conditions.

02:38:56 6 Q. Did I understand that right, you said minimum
02:38:58 7 corrections that could be made?

02:38:59 8 A. Correct. So, obviously, there could be other errors,
02:39:03 9 and based on his testimony, I'm certainly aware of other
02:39:07 10 errors, but I'm focusing on the minimum corrections under
02:39:10 11 his approach and his inputs.

02:39:14 12 Q. I've got your next slide.

02:39:17 13 In connection with that, can you give us a summary
02:39:21 14 of your overall opinion in this case?

02:39:24 15 A. Sure. And this reflects the two time periods that
02:39:28 16 Mr. Perdue addressed, that the damages starting some time
02:39:32 17 in 2019, and I'll explain that more later, through
02:39:36 18 essentially -- is that today or tomorrow? I think perhaps
02:39:40 19 today.

02:39:41 20 Q. Today is the 20th.

02:39:43 21 A. And then the next part is what Mr. Perdue presented for
02:39:46 22 the damage -- the future damage period, which would be
02:39:48 23 tomorrow through the patent expiration, which is in late
02:39:51 24 2022.

02:39:54 25 So what this shows is his damages numbers that he

02:39:59 1 presented yesterday, I believe, and then what I call a
02:40:02 2 partial correction. I only made changes to these inputs
02:40:09 3 of his own methodology, and the damages would be in the
02:40:13 4 range -- you can see it's quite a bit lower. And, in fact,
02:40:18 5 at the very bottom, I point out that his damages based on
02:40:21 6 these input errors overstate damages at least five times
02:40:25 7 and as much as 13 times.

02:40:28 8 Q. Okay. And that's -- that's also including the
02:40:31 9 assumption that somebody uses every one of these products
02:40:35 10 to infringe, right?

02:40:36 11 A. Well, a couple parts. One is that all these products
02:40:40 12 would actually end up in the United States, be used in the
02:40:47 13 United States. And the second part would be that everyone
02:40:49 14 that has one of the units is performing the method of
02:40:57 15 making these particular adjustment on their monitor.

02:41:01 16 Q. Does your analysis include all of the products that
02:41:04 17 Mr. Perdue included?

02:41:06 18 A. It includes all the products that I understand were
02:41:09 19 accused by Lone Star, but this does take out those products
02:41:13 20 where I understand Lone Star and Dr. Ducharme did not
02:41:18 21 identify the products to be accused products.

02:41:20 22 Q. Okay. And it may be clear, but let's just follow up.

02:41:26 23 Is it your understanding that Mr. Perdue included
02:41:28 24 products in his calculations that aren't even accused of
02:41:33 25 infringement?

02:41:33 1 A. Yes. And he said that it relates to a disagreement.
02:41:37 2 So I identify those issues as I go through my testimony
02:41:40 3 today based on a disagreement. But, yes, my understanding
02:41:48 4 is he included additional products beyond the ones that
02:41:56 5 were identified by Lone Star to be accused products.

02:41:56 6 Q. And I noticed you have a couple of little red notes
02:41:57 7 down at the bottom. One of them says assumes damages
02:42:00 8 apply. What does that refer to?

02:42:02 9 A. That refers the basic assumption that someone like me
02:42:06 10 has to undertake in all these -- all my work. In this
02:42:10 11 setting, we assume -- we as damage analysts assume that the
02:42:14 12 patent is not invalid and that the patent is infringed. So
02:42:17 13 we go forward with the damage analysis with that
02:42:20 14 assumption.

02:42:20 15 Q. Okay. I'm going to move to your next slide and ask you
02:42:24 16 to -- is this -- are these the assumptions that you're
02:42:28 17 talking about?

02:42:28 18 A. Yes. These are the assumptions that are most relative
02:42:32 19 to -- to this type of patent infringement matter. Others
02:42:34 20 are more complex and have other issues, but we assume that
02:42:38 21 the patent is valid, or as I said before, not invalid,
02:42:42 22 because it's presumed to be valid. We assume that the
02:42:48 23 patent is infringed, that it's enforceable, and the patent
02:42:52 24 owner has the right to exclude others from using such a
02:42:55 25 patent.

02:42:55 1 Q. Okay. And if one of these -- if the jury decides that
02:43:00 2 one of these assumptions doesn't apply in this case, then
02:43:04 3 what happens?

02:43:04 4 A. Well, for example, if the jury finds the patent is not
02:43:10 5 valid, or not infringed, then damages don't apply at all,
02:43:14 6 and then my work's -- then it just won't matter to the
02:43:18 7 ultimate findings here.

02:43:20 8 Q. Okay. But in your assumptions for providing this, you
02:43:25 9 had to assume the patent is not invalid and that it is
02:43:29 10 infringed by ASUS, right?

02:43:36 11 A. Absolutely. And, again, that's standard in my work.

02:43:40 12 Q. I'm going to go to your next slide.

02:43:41 13 What's your first step for assessing damages after
02:43:45 14 making those assumptions?

02:43:46 15 A. Well, the first question is the question of what is the
02:43:48 16 type of damages. And in patent infringement matters,
02:43:50 17 there's essentially two types, lost profits and/or a
02:43:59 18 reasonable royalty, because sometimes you might have lost
02:44:01 19 profit for some of the products but not all.

02:44:05 20 And in this case, lost profits are not relevant
02:44:08 21 because Lone Star does not manufacture a competing product.
02:44:11 22 So that then leads to this question of what is a reasonable
02:44:15 23 royalty? And this assessment of the Georgia-Pacific
02:44:18 24 factors, which again comes from a case from a long time
02:44:25 25 ago, back -- I think it's in the '80s when this case -- it

02:44:28 1 was like this -- a case where a judge made rulings about
02:44:32 2 these 15 factors and how they should be analyzed for
02:44:36 3 purposes of reasonable royalties.

02:44:38 4 And you don't have to use the Georgia-Pacific
02:44:41 5 approach. Mr. Perdue suggested that you would have to use
02:44:44 6 it. It's just often used because we have this great
02:44:49 7 framework that came from this prior Court.

02:44:52 8 Q. And did you use the Georgia-Pacific factors here?

02:44:54 9 A. Yes, in the context of the -- the correction of
02:44:59 10 Mr. Perdue's analysis.

02:45:00 11 Q. Okay. Let's move on to some of that correction.

02:45:06 12 And you discuss -- this is your next slide -- I'm
02:45:12 13 sorry. Let's move on to that in a second.

02:45:16 14 Can you -- before we get to that, can you, using
02:45:19 15 this slide, talk to the jury a bit about how you get to the
02:45:22 16 calculation of a reasonable royalty?

02:45:24 17 A. Absolutely. So this shows the pretty basic formula or
02:45:30 18 calculation.

02:45:31 19 Start with the properly accused products and the
02:45:35 20 portion of revenues for the units that would be associated
02:45:38 21 with the accused products.

02:45:40 22 The second step would be to determine a proper
02:45:42 23 royalty rate. Again, it could be on a per unit basis, it
02:45:47 24 could be a percentage royalty, but make sure it's all
02:45:50 25 consistent, and that will provide a reasonable royalty for

02:45:54 1 a damages analysis.

02:45:58 2 MR. OLIVER: Your Honor, I just -- before we get
02:46:01 3 to there, I realized that there may be a point of order. I
02:46:07 4 think there was an objection to one of the slides, but --
02:46:10 5 counsel mentioned it by email but didn't raise it in court.
02:46:14 6 Should we keep going or --

02:46:17 7 THE COURT: Do we know -- Mr. Lee, do you know
02:46:20 8 what he is referring to?

02:46:22 9 MR. LEE: I do.

02:46:23 10 Are you going to plan to resume --

02:46:24 11 THE COURT: Mr. Lee, I need you up to the
02:46:27 12 microphone.

02:46:28 13 MR. LEE: We do have an objection. My question
02:46:31 14 was if it's going to be used pretty soon, we can
02:46:33 15 certainly -- we should raise it.

02:46:35 16 THE COURT: We'll probably take break in a few
02:46:41 17 minutes.

02:46:41 18 Mr. Oliver, can we push it off until the break?

02:46:45 19 MR. OLIVER: Yes.

02:46:45 20 THE COURT: Okay.

02:46:46 21 MR. OLIVER: Sorry. I just wanted to make sure I
02:46:51 22 didn't get to it before we got to the break.

02:46:58 23 BY MR. OLIVER:

02:46:58 24 Q. Okay. So using this type of calculation, will you
02:47:05 25 summarize the key calculation and input errors that you

02:47:10 1 found in Mr. Perdue's trial presentation and I'll move you
02:47:13 2 on to your next slide.

02:47:13 3 A. Yes, this -- I was going to ask for the next slide.

02:47:13 4 Thank you.

02:47:13 5 So this is kind of a roadmap chart or slide, and I
02:47:18 6 won't get into too much detail now because as I step
02:47:24 7 through these two steps, we'll be able to see the
02:47:26 8 information again.

02:47:27 9 But, basically, you can see in those three boxes
02:47:30 10 the issue: improperly apportioned revenues, that also
02:47:36 11 include non-accused products or revenues from non-accused
02:47:38 12 products; an overstated royalty rate, and that leads to
02:47:42 13 overstated reasonable royalty calculation; and then
02:47:46 14 focusing on the red is really what I would be suggesting
02:47:48 15 here, that even under his own approach, using his own
02:47:52 16 inputs, the apportion rate has to be smaller and the
02:47:56 17 royalty rate has to be smaller. And making those
02:47:59 18 corrections is what leads to ultimately my main conclusions
02:48:05 19 here.

02:48:05 20 Q. Okay. So can you just give us a brief -- very brief
02:48:14 21 overall summary of that? I may have lost it in the
02:48:17 22 details.

02:48:18 23 A. Well, I suggested that we'll see it as we come to the
02:48:21 24 next slide, for example, on one of these sections.

02:48:25 25 Q. Oh, okay. Let's go to your next one and do it that

02:48:25 1 way.

02:48:28 2 Is that the right one?

02:48:30 3 So what are the input errors that you're referring
02:48:36 4 to on this slide?

02:48:37 5 A. So this is focused on the royalty rate. So the input
02:48:42 6 error is the use of non-comparable information about
02:48:46 7 royalty rates from other license agreements that can't be
02:48:48 8 and were not shown to be comparable to the patented
02:48:52 9 technology here.

02:48:53 10 And then, in particular, even his own input or
02:48:58 11 this adjustment that he performs to the exclusive license
02:49:06 12 agreements that he understated that adjustment and that
02:49:09 13 overstated his royalty rate and it overstates damages. And
02:49:13 14 I'll address that later.

02:49:13 15 Q. Okay. And one of the -- one of the terms you use there
02:49:18 16 is average industry -- average industry royalty rates. But
02:49:24 17 he said he used a median. Does that make a difference with
02:49:29 18 respect to this point?

02:49:30 19 A. No. The problem with using non-comparable license
02:49:35 20 agreements means you can't -- you can't show that either an
02:49:39 21 average rate or a median rate from a -- from several
02:49:43 22 license agreements that are not comparable. It's not going
02:49:45 23 to be appropriate for using in a calculation of reasonable
02:49:48 24 royalty.

02:49:51 25 It doesn't matter if it's a median or a mean or an

02:49:54 1 average, that same problem is going to filter through all
02:49:57 2 the results in the presentation.

02:49:59 3 Q. And I see you mention there, reasonable comparability.
02:50:09 4 Mr. Perdue said he used, I believe, economic comparability
02:50:13 5 in his analysis. Is that appropriate?

02:50:15 6 A. I don't recall him saying economic comparability.
02:50:19 7 There were problems from an economic comparability basis
02:50:23 8 also. But typically, starting point is to show technical
02:50:29 9 comparability, and you get input from technical experts,
02:50:33 10 people like me, and input from technical experts to address
02:50:36 11 the technical comparability. And in my view, Mr. Perdue
02:50:40 12 didn't address economic or technical comparability.

02:50:43 13 Q. And you prepared a summary in your report related to
02:50:47 14 the details on the lack of comparability, right?

02:50:50 15 A. Absolutely, yes.

02:50:51 16 Q. I'm going to put that up here, and would you explain
02:50:54 17 that to us? Oh, well, the writing is small. Hopefully the
02:50:58 18 jury has good eyes.

02:51:00 19 A. I can -- at least I can read this.

02:51:02 20 So these are the 10 license agreements that
02:51:09 21 Mr. Perdue addressed as -- you know, he first looked for
02:51:12 22 more detail and he couldn't find the detail, so he kind of
02:51:16 23 went to less detail and ultimately ends up with 10
02:51:20 24 agreements that are not economically or technically
02:51:23 25 comparable. And I can address some specifics, but what --

02:51:27 1 what this page from my report did was lay out these certain
02:51:30 2 issues of non-comparability, which is the header in the
02:51:35 3 column with most of the words here, and we can look through
02:51:39 4 some of these examples and see the problems that exist.

02:51:43 5 Q. Will you point out a couple of examples of that for us?

02:51:47 6 A. Yeah, I'll do a few here. The first entry is the top
02:51:51 7 entry which was Princeton, et al., because it was actually
02:51:59 8 several large universities, Princeton, USC, University of
02:52:02 9 Michigan, that entered into an exclusive license, and
02:52:05 10 you'll hear much about exclusive licenses and the problem
02:52:09 11 with exclusive licenses when doing this type of analysis.

02:52:13 12 But you can also see -- and under that column
02:52:15 13 certain issues of non-comparability. This license
02:52:18 14 agreement covered 185 U.S. patents, 64 pending U.S. patents
02:52:25 15 which means they would likely be issuing soon. These were
02:52:30 16 noted as key patents from USC, Princeton, and the
02:52:35 17 University of Michigan. And I use the word term here, "not
02:52:41 18 naked patent license."

02:52:42 19 But what we refer to as the naked patent licenses
02:52:45 20 is similar to what we have in this case, where you would
02:52:49 21 assume the parties negotiate where one gets a license to
02:52:53 22 the patent and that's only a license to the patent. It
02:52:58 23 doesn't include trade secrets or trademarks or know-how or
02:53:06 24 assistance from the inventors. You just get the rights to
02:53:09 25 use that patent. It's very different than what you see

02:53:12 1 here.

02:53:12 2 Q. Okay. And did you hear me discuss that a little bit
02:53:16 3 with Mr. Perdue yesterday?

02:53:17 4 A. Yes.

02:53:17 5 Q. And do you recall he said he didn't discount patent
02:53:22 6 value at all for to know-how or the assistance?

02:53:25 7 A. Correct. Or any other of the differences. All he did
02:53:30 8 was try to make an adjustment for the exclusivity
02:53:37 9 difference. And, again, in my opinion, he greatly
02:53:40 10 understated that reduction.

02:53:41 11 Q. Okay. And before we get into any more details, did you
02:53:45 12 reach any type of overall conclusion about the
02:53:52 13 technological comparability or the economic comparability
02:53:55 14 of these other licenses that Mr. Perdue relied on?

02:53:57 15 A. Yes. Each of them have the problem about the economic
02:54:01 16 comparability. These typically are exclusive, include
02:54:04 17 other things like trade secrets and assistance and
02:54:09 18 know-how. Sometimes they don't even deal with the right
02:54:11 19 product area. For example, the bottom three on this list,
02:54:14 20 one has to do with a headphone for gaming. One is -- is
02:54:20 21 related to a subwoofer. The bottom entry is related to --
02:54:29 22 let's see, mouse technology. So they don't even relate to
02:54:33 23 displays or monitors or TVs.

02:54:35 24 Q. What about the one right -- the third one that talks
02:54:38 25 about TV guide? Is that related to TVs?

02:54:42 1 A. Gem Star-TV Guide. So this is an agreement between an
02:54:45 2 inventor who started the company -- founded the company Gem
02:54:52 3 Star. So it's between the inventor who is the founder and
02:54:56 4 principal owner initially of Gem Star. Gem Star and TV
02:54:59 5 Guide ended up joining together as a company. And I have
02:55:03 6 experience in that particular area because I worked for
02:55:05 7 Netflix and Vizio in cases where Gem Star sued them for
02:55:13 8 infringement relating to the -- an interactive program
02:55:16 9 guide for TVs.

02:55:17 10 So, once again, it's very different technology.
02:55:19 11 It's not technically comparable, and it's not economically
02:55:23 12 comparable because here we have a relationship between the
02:55:26 13 owner/inventor of the patent and his own company.

02:55:36 14 Q. And did you already mention who Gem Star sued over
02:55:40 15 this?

02:55:40 16 A. Gem Star sued most of the cable operators and TV
02:55:43 17 manufacturers. Vizio was an example of that, also Netflix,
02:55:50 18 as I mentioned. So these were viewed by Gem Star to be
02:55:54 19 foundational patents that relate to interactive TV guides.

02:56:02 20 Q. Okay. And it mentions that that's exclusive. Can you
02:56:07 21 explain why you say that?

02:56:08 22 A. Yes. And this goes to this fundamental difference
02:56:12 23 between exclusive patent license and non-exclusive. So
02:56:15 24 this is an example where the inventor said: I'm going to
02:56:19 25 license my technology to this company, and they're going to

02:56:22 1 have all rights to this patented technology. And, again,
02:56:24 2 it's more than one patent. It's a whole group of patents
02:56:28 3 that would relate to interactive program guides in this
02:56:31 4 example.

02:56:32 5 So the company that has exclusive license can make
02:56:37 6 sure that no other company is going to get rights to those
02:56:41 7 patents and have close to ownership of that patented
02:56:47 8 technology. And most of the times, they can also sue other
02:56:51 9 companies because they have rights through their exclusive
02:56:54 10 license to control that patented technology. It's very
02:56:56 11 different from a non-exclusive license.

02:56:58 12 And there's one other example here that I would
02:57:00 13 point to in that regard.

02:57:02 14 Q. Which example would you like to point out?

02:57:04 15 A. It's the one -- it's five down, and it's associated
02:57:06 16 with the Perdue Count No. 10. It was this type of example.
02:57:10 17 And Silicon Image is the licensee. He characterized it as
02:57:16 18 a non-exclusive license, but in many ways it has important
02:57:23 19 exclusivity aspects. As I note here, it's not truly
02:57:26 20 non-exclusive because the licensee has full rights to
02:57:31 21 sublicense others, and it's exclusive going forward in the
02:57:34 22 field of use. And the licensee has the full rights to
02:57:39 23 enforce the patents.

02:57:39 24 And then the last thing I note about this
02:57:42 25 agreement is the royalty rate went down every year. So

02:57:46 1 Mr. Perdue includes it as an example of a 4.2 percent
02:57:51 2 royalty rate on the high-end. But after five years, six
02:57:55 3 years, it essentially goes down 0.5 percent and then to 0.
02:58:01 4 And that's an important adjustment that I will talk about
02:58:04 5 in a moment.

02:58:05 6 Q. And I notice the third one from the bottom, you seem to
02:58:08 7 have a lot of notes on. Can you touch on that one for us?

02:58:11 8 A. I already did. As I mentioned, it relates to a
02:58:15 9 headphone for gaming. But the other notes about this are
02:58:18 10 in addition to patent rights, which were exclusive -- this
02:58:23 11 is another example of an exclusive license -- there were
02:58:27 12 rights to trademark, engineering files, tooling,
02:58:34 13 prototypes, and that the licensee was also moving, paying
02:58:38 14 for the right to change manufacturing.

02:58:42 15 So again, very complex, exclusive agreement that
02:58:46 16 typically will not be comparable economically to a
02:58:49 17 non-exclusive license for rights to use a patent.

02:58:53 18 Q. So I notice you keep emphasizing these are all
02:58:57 19 exclusive, exclusive, exclusive. Is there a concern with
02:59:01 20 respect to that?

02:59:01 21 A. Absolutely. Because of the difference between an
02:59:04 22 exclusive license, which, again, would generally relate to
02:59:07 23 technology that's viewed significantly enough that one
02:59:12 24 party is saying I want to have exclusive rights to this. I
02:59:15 25 want to be able to enforce these patent rights against

02:59:18 1 others. I don't want other companies using it. I want
02:59:21 2 this agreement before I start developing my product.
02:59:24 3 It's -- it's very different from an example of a
02:59:28 4 non-exclusive patent -- patent license.

02:59:30 5 Q. Okay. And what is a non-exclusive patent license?

02:59:34 6 A. Well, that would be an example where one company may
02:59:39 7 try to enforce its patents many years later and offer a
02:59:43 8 license to everyone that it believes would be using that
02:59:47 9 technology.

02:59:48 10 So not -- no one company would have the rights to
02:59:51 11 be the only company to use that patented technology, and
02:59:55 12 the company taking a license under that circumstance has no
02:59:59 13 control about what other companies might be able to get
03:00:02 14 similar rights.

03:00:03 15 Q. But Mr. Perdue said that he considered exclusivity and
03:00:07 16 reduced the rates based on that, right?

03:00:10 17 A. Yes. And he went forward with a calculation, but that
03:00:14 18 calculation, which also had flaws -- that calculation
03:00:17 19 doesn't deal with this inherent bias where exclusive
03:00:20 20 licenses just relate to -- to a different type of patented
03:00:30 21 technology.

03:00:30 22 And the fact that -- I think Mr. Perdue talked
03:00:33 23 about nine agreements, kind of at the end of his testimony.
03:00:37 24 Seven of those nine, and eight if you include the Silicon
03:00:45 25 Image example I was talking about, seven or eight of the

03:00:48 1 nine are exclusive licenses. That's a significant
03:00:52 2 comparability problem.

03:00:52 3 Q. And I'd like to pull up your next slide and ask you to
03:00:55 4 address the problems comparing a non-exclusive license to
03:01:00 5 Lone Star's '435 patent with these exclusive licenses we
03:01:04 6 see?

03:01:04 7 A. I'll try to be brief here because I think I touched on
03:01:07 8 some of this. But a exclusive patent license generally
03:01:11 9 relates to more important technology, and the licensee
03:01:15 10 views that it wants those exclusive rights to be able to
03:01:18 11 improve a product it's developing. And it will have
03:01:21 12 competitive advantages from that. And thus it typically
03:01:24 13 does correspond with product development efforts. And the
03:01:29 14 licenses and the settlements for the patent-in-suit here is
03:01:36 15 substantially different.

03:01:37 16 So this patent, as presented in this case, was not
03:01:40 17 licensed until late in the life of the patent. You
03:01:43 18 heard -- we heard testimony about NEC, Sharp, Acer, then
03:01:50 19 later Barco took -- took non-exclusive agreements here.
03:01:55 20 Those were all within the last four or five years. They
03:01:58 21 were always licensed or released with non-exclusive
03:02:04 22 rights -- non-exclusive.

03:02:05 23 And the licensing took place with global companies
03:02:08 24 and with -- with global activity. They might manufacture
03:02:13 25 in Japan or Taiwan, but they were getting rights not to

03:02:17 1 just the '435 patent but to all the patents that Lone Star
03:02:21 2 had, which are worth more than the '435, the U.S. Patent,
03:02:28 3 but also companion patents that come from other countries
03:02:31 4 and would cover that activity in other countries.

03:02:34 5 Q. So you've been talking about the '435 patent, but what
03:02:40 6 is the overall point about Mr. Perdue's use of seven
03:02:45 7 exclusive licenses for his royalty calculation?

03:02:47 8 A. That it's an important example of non-comparable
03:02:52 9 technical and economic comparison, so there's a fundamental
03:02:56 10 problem there. But what I focus on in my correction is his
03:03:00 11 input and the use of his information.

03:03:02 12 Q. Okay. And -- but with those exclusive licenses, they
03:03:07 13 make the license rate higher or lower?

03:03:10 14 A. Well, two aspects will make the rate higher. One is
03:03:17 15 just the exclusivity difference that Mr. Perdue is
03:03:19 16 addressing, but also the bias point that I'm addressing.
03:03:22 17 It's just fundamentally more important technology.

03:03:25 18 Q. But didn't he say that he had applied a downward
03:03:31 19 adjustment to the rates?

03:03:32 20 A. He did.

03:03:32 21 Q. And what's wrong with what he did?

03:03:35 22 A. Well, suggesting that based on his own inputs for doing
03:03:40 23 that, he did not apply the adjustment appropriately. I
03:03:45 24 mean, that's what I'll address now if --

03:03:47 25 Q. Okay. Yeah, and you prepared a slide on that, right?

03:03:51 1 A. Absolutely.

03:03:52 2 Q. Okay. Let's move to that. Would you address that?

03:03:55 3 A. Yeah. So I understood from Mr. Perdue's report that he
03:04:00 4 had two inputs that he addressed and he testified about
03:04:05 5 yesterday -- about them yesterday. I wasn't quite sure how
03:04:09 6 he ultimately derived his 35 percent reduction, but his two
03:04:14 7 inputs were -- first, this one example of a license
03:04:17 8 agreement between MBI and DuPont, which, again, is not
03:04:23 9 anything related to technology in this case.

03:04:25 10 But he observed that if -- in that agreement, if
03:04:30 11 the license agreement changed during the course of the
03:04:32 12 agreement from an exclusive license to a non-exclusive
03:04:36 13 license, the royalty rate went down. That's a reflection
03:04:39 14 of facts I've been talking about. The promise -- it's the
03:04:46 15 same technology? It's just that they're recognizing
03:04:48 16 that -- we might start exclusive, and you might develop a
03:04:52 17 product for the first five years and maybe in the sixth
03:04:55 18 year, we'll grab rights to another company. And we'll give
03:04:59 19 you credit for that, so we'll lower the royalty rate.
03:05:02 20 That's the example that he pointed to. It was a 25 percent
03:05:05 21 reduction, which may or may not happen, but that's what the
03:05:08 22 parties agreed to.

03:05:09 23 Q. Okay. And you mentioned to me you wanted to explain
03:05:15 24 one of the excerpts from Mr. Perdue's reports that you have
03:05:25 25 on the slide. Can I put that up and have you explain why

03:05:26 1 you thought it was important?

03:05:27 2 A. Yes. And he was questioned about this yesterday. You
03:05:31 3 will probably recall this. I didn't quite understand why
03:05:34 4 he discounted this particular evidence, as I'll mention in
03:05:37 5 a moment.

03:05:37 6 But the other thing he pointed to was an empirical
03:05:42 7 study, 1,458 license agreements, and these come from SEC
03:05:48 8 filings, just like that prior example, the MBI/DuPont. How
03:05:55 9 do we know these rates? They're -- generally, they're not
03:05:57 10 publicly made or known. But sometimes the comp -- like,
03:05:59 11 for example, if you're -- if you're the owner of the
03:06:00 12 company and you're licensing your own company to your
03:06:03 13 patents, you need to disclose that if you're a public
03:06:07 14 company, and it'll show up in an SEC annual report of 10-K.
03:06:12 15 Sometimes the entire license agreement might be attached.

03:06:14 16 So people can -- this ktMINE company Mr. Perdue
03:06:19 17 addressed, they compile these data based on the public
03:06:23 18 reports they get.

03:06:24 19 So Mr. Varner here did a study of over a thousand
03:06:30 20 license agreements, and what he reported is some of those
03:06:33 21 agreements were exclusive agreements, and then a subset of
03:06:36 22 those exclusive agreements are agreements where there's a
03:06:40 23 term that talks about what happens if we go from exclusive
03:06:44 24 to non-exclusive.

03:06:45 25 But what -- what was reported -- you see at the

03:06:48 1 very bottom here of that type of subset, subset exclusive
03:06:53 2 license, further subset, the type of exclusive license that
03:06:56 3 has terms when you change from exclusive to non-exclusive,
03:07:01 4 over two-thirds of that, the rate reduction was 50 percent.

03:07:09 5 Somehow Mr. Perdue takes this evidence that says
03:07:11 6 two-thirds -- most of these reduced 50 percent, but I'm
03:07:15 7 going to consider the DuPont example, and I'll use 35
03:07:19 8 instead of the 50. That's inconsistent with the own --
03:07:26 9 their own primary data source that he's using that says the
03:07:29 10 vast majority have a 50 percent reduction, and as he
03:07:32 11 testified yesterday, for the other one-third -- or actually
03:07:36 12 less than one-third, we don't know if it's a bigger
03:07:39 13 adjustment downward or like DuPont, smaller, but certainly
03:07:42 14 there's no basis to use anything other than 50 percent
03:07:46 15 reduction if you're going to use his methodology.

03:07:50 16 Q. Okay. And then based on that last statement that you
03:08:02 17 needed to use at least a 50 percent reduction, how would
03:08:06 18 that impact the overall resulting royalty rate?

03:08:10 19 A. Right. And, again, I would view this as a minimum
03:08:11 20 correction, because, again, just using his own approach and
03:08:14 21 his own inputs -- and the next slide actually will show my
03:08:19 22 adjustment to his calculation.

03:08:21 23 Q. You want the next slide?

03:08:23 24 A. Yes, please.

03:08:27 25 Q. Okay. So would you explain what this slide shows with

03:08:30 1 respect to your adjustment?

03:08:31 2 A. Yes. It only does two differences from Mr. Varner's
03:08:40 3 calculation. One difference is the Silicon Image example
03:08:44 4 I've been talking about.

03:08:47 5 I said that the rate went down over time from
03:08:47 6 the 4.2 percent that Mr. Perdue used to after five years,
03:08:54 7 it went to 0.5, and after six years, it would go
03:08:54 8 to 0 percent.

03:08:57 9 And, remember, Mr. Perdue said that the
03:09:01 10 hypothetical agreement here was from 2013. So the parties
03:09:04 11 negotiate in 2013. Then I'm going to focus on damages in
03:09:09 12 2019, 2020, 2021. So for this agreement, by 2020, the rate
03:09:14 13 would be 0 percent. But I used 0.5 percent, which is
03:09:21 14 effectively what the rate would have been in 2019.

03:09:23 15 Other than that, the other corrections for all
03:09:28 16 these seven exclusive licenses -- and, again, I didn't do
03:09:31 17 the adjustment for Silicon Image, which, again, has
03:09:37 18 exclusive aspects, but for all seven that he adjusted, I
03:09:41 19 adjusted 50 percent rather than the 35 percent he used.

03:09:45 20 And you can see at the bottom here, the median and
03:09:47 21 then the midpoint, his 2.3 percent calculation goes
03:09:52 22 to 1.5 percent.

03:09:54 23 Q. Okay. Let's move on to your next correction. I think
03:09:58 24 you prepared a slide for it. And this is part of one of
03:10:01 25 the first slides you showed, I believe.

03:10:05 1 What does -- what does this relate to?

03:10:08 2 A. Well, this relates to a apportionment point, and you'll
03:10:13 3 recall that Mr. Perdue used a 14 percent adjustment based
03:10:17 4 on the Philips TV and set-top box patent licensing program.

03:10:22 5 And the first thing I'd say is the use of that
03:10:29 6 program, which is, you know, a famous Philips patent
03:10:33 7 licensing program for TVs. Philips talks about the fact
03:10:38 8 that it's licensed all the major TV manufacturers in the
03:10:45 9 world, and it relates to Philips's patent and technology
03:10:49 10 clusters for how Philips thinks its patent should fall and
03:10:54 11 how important some of those patent are compared to others.

03:10:56 12 That relates to Philips's program, not to ASUS
03:11:00 13 monitors, not to how the patented technology at issue in
03:11:03 14 this case might relate to monitors. So there's a
03:11:06 15 fundamental -- again, a fundamental technical comparability
03:11:10 16 issue here.

03:11:10 17 Q. And down at the bottom, you have something about
03:11:14 18 royalty base disagreements. Why are you saying royalty
03:11:18 19 base disagreements rather than errors by Mr. Perdue?

03:11:20 20 A. I actually had errors in my slide a couple days ago,
03:11:26 21 and I changed it to disagreements because I heard
03:11:28 22 Mr. Perdue's explanation that he's not opining about the
03:11:33 23 royalty base. He just understands there's a disagreement
03:11:36 24 between the parties.

03:11:37 25 So the parties have different views about what

03:11:40 1 should be included in the royalty calculation, and I'll
03:11:45 2 address that.

03:11:45 3 Q. Okay. And I'll come back to that a little bit later,
03:11:49 4 but remind the jury about how Mr. Perdue used the Philips
03:11:53 5 patents and royalty rates to do an apportionment in this
03:11:56 6 case.

03:11:57 7 A. Sure. So Mr. Perdue looked to this set-top box TV and
03:12:01 8 set-top box licensing program, and it had 145 patents
03:12:06 9 roughly in that program. But Philips put the technology
03:12:10 10 into different clusters. There were 16 clusters he
03:12:13 11 testified to, and, I agree, there were -- there were 16
03:12:16 12 clusters. And some of the patents are included in certain
03:12:23 13 clusters, other patents are included in others.

03:12:25 14 Philips specified royalty rates. And what
03:12:28 15 Mr. Perdue said, I want to look for one where the title of
03:12:31 16 the cluster seems to make sense, and I'll take the royalty
03:12:34 17 rate for that, and I'll divide that royalty rate to the
03:12:37 18 royalty rate for everything, and that would be a fair way
03:12:39 19 to represent a portion of the monitor -- of the ASUS
03:12:44 20 monitor that might relate to video control.

03:12:47 21 So this concept of apportionment is important. It
03:12:51 22 has to be done in cases like this. He attempted to do it.
03:12:54 23 He just used the methodology that didn't have technical
03:12:59 24 support or economic support.

03:13:00 25 Q. Was it right for him to use the Philips -- the TV and

03:13:04 1 set-top box license program?

03:13:07 2 A. I personally wouldn't use that approach because it
03:13:12 3 represents Philips and not necessarily everything that
03:13:15 4 might go into an ASUS monitor. But --

03:13:18 5 Q. Did Mr. Perdue present any solid evidence of comparing
03:13:23 6 the technologies as opposed to just looking at the words?

03:13:27 7 A. My understanding from his testimony yesterday is that
03:13:30 8 he looked at the term, the title of the technology cluster,
03:13:36 9 and based on that title, he seemed to think that that was
03:13:39 10 the one that might be the most relevant.

03:13:42 11 And I actually looked at the patents, and I
03:13:45 12 prepared a slide that shows the -- some of the information
03:13:47 13 about the patents.

03:13:54 14 Q. Okay. Well, before we do that, you say in the top
03:13:57 15 bullet there in red, the apportion rate must be smaller
03:14:02 16 under his own approach. How did -- why did you conclude
03:14:05 17 that?

03:14:05 18 A. Because in my opinion, if you're going to use something
03:14:08 19 like a third-party's approach, like Philips, and you
03:14:12 20 haven't really demonstrated that any one particular
03:14:15 21 technology cluster is relevant to the ASUS monitors and how
03:14:18 22 you might allocate all the technology in an ASUS monitor,
03:14:22 23 then you shouldn't take something because the title is --
03:14:26 24 is TV -- I think it's Backlighting and Dimming, and later
03:14:31 25 Philips changed that title to TV Display. So TV display

03:14:36 1 doesn't really relate to what Mr. Perdue said was somehow
03:14:41 2 controls -- video controls or a monitor. TV display is
03:14:45 3 something different.

03:14:45 4 Q. So did you correct for what you -- the error you point
03:14:49 5 out there?

03:14:53 6 A. I did, yes. And so, again, using his approach, using
03:14:57 7 this Philips program, which I disagree with -- but rather
03:15:01 8 than use a particular cluster or category without technical
03:15:06 9 input and support, I used the average over 16 categories.

03:15:10 10 MR. OLIVER: Okay. If Your Honor wants, we can
03:15:13 11 stop now. It's a good point. Or we can --

03:15:15 12 THE COURT: Okay. Let's do that. Let's take our
03:15:19 13 afternoon recess at this time.

03:15:20 14 Ladies and gentlemen, we'll be in recess about
03:15:23 15 15 minutes.

03:15:25 16 COURT SECURITY OFFICER: All rise for the jury.

03:15:28 17 (Jury out.)

03:15:51 18 THE COURT: Okay. You all may be seated.

03:15:54 19 The witness can stand down if he wishes to.

03:15:58 20 Can we hear this dispute about the -- one of the
03:16:01 21 slides?

03:16:02 22 And if you would, just put it on the Elmo so you
03:16:05 23 could see it.

03:16:06 24 MR. OLIVER: Sure. Is that on or -- it was this
03:16:25 25 slide, right?

03:16:27 1 MR. LEE: Yes, it is.

03:16:33 2 Your Honor, we object to the two bullet points,
03:16:37 3 the very last part of the page.

03:16:39 4 We had previously raised the objections to another
03:16:42 5 slide. This was inadvertently missed on our part. The
03:16:48 6 Defendant ASUS had withdrawn those ones.

03:16:50 7 The problem with these two bullet points are
03:16:53 8 they're outside the scope of Mr. Reed's expert report. He
03:16:57 9 is basically making the inferential link -- leap here that
03:17:01 10 the products are not at all used in the United States
03:17:03 11 because certain ASUS products are shipped to the United
03:17:07 12 States and are then shipped back abroad. He doesn't talk
03:17:11 13 about that in his expert report.

03:17:15 14 MR. OLIVER: Your Honor, I believe that he did
03:17:22 15 talk about it. He mentioned the distributors and
03:17:27 16 researched the websites that showed that the distributors
03:17:31 17 are international and included citations to those in his
03:17:35 18 report.

03:17:35 19 MR. LEE: What Mr. Reed has done is he's shown
03:17:39 20 that there's distributors that are customers of ASUS, that
03:17:43 21 these customers do have distribution sites.

03:17:46 22 What he has not written in his report is that a
03:17:48 23 single ASUS product purchased by these customers have been
03:17:52 24 shipped outside the United States.

03:17:55 25 THE COURT: So do we have a copy of the report?

03:17:57 1 MR. LEE: I can put it on the Elmo.

03:18:43 2 THE COURT: Okay. So, Mr. Oliver, where is it
03:18:46 3 disclosed?

03:18:47 4 MR. OLIVER: So -- I'm sorry. I'm trying to see
03:19:00 5 the slide to see -- remember what he said.

03:19:05 6 So we're looking at Pages 21 and 22 in the report,
03:19:12 7 and on the top of Page 22 -- we're looking at Page 21 on
03:19:17 8 the Elmo, but on the top of Page 22, he says that ASUS's
03:19:24 9 distributors include customers that are known to provide
03:19:27 10 product to customers outside the U.S.

11 And then he later on down the page says, I'm not
12 aware of any discovery attempted by Lone Star to address
13 distribution of the accused products to consumers outside
14 the United States.

15 THE COURT: So I'm not -- I'm looking at something
03:19:49 16 different from what you're reading.

03:19:49 17 MR. OLIVER: Yeah. Yeah.

03:19:50 18 THE COURT: Tell me what you're reading from.

03:19:50 19 MR. OLIVER: Page --

03:19:52 20 THE COURT: Could you put it on the screen maybe
03:19:54 21 so we can all see it?

03:19:56 22 MR. OLIVER: Yes. Would you like me to hand it to
03:19:59 23 you, Your Honor?

03:20:00 24 THE COURT: No, just put it on the screen so we
03:20:03 25 can all see it.

03:20:04 1 MR. OLIVER: So starting from where my finger is,
03:20:14 2 these include customers that are known to provide product
03:20:17 3 to customers outside the U.S.

03:20:19 4 If we drop further -- further on down the page to
03:20:23 5 the next paragraph, I'm not aware of any discovery
03:20:28 6 attempted by Lone Star to address distribution of the
03:20:31 7 accused products to consumers outside the United States.

03:20:45 8 And the full paragraph there.

03:20:47 9 THE COURT: Okay. Mr. Lee, I'm going to overrule
03:20:54 10 your objection. I think it's disclosed. So I'll allow the
03:20:57 11 slide to be used.

03:20:58 12 MR. OLIVER: Thank you, Your Honor.

03:20:59 13 THE COURT: Okay. We'll take a short recess.

03:21:01 14 COURT SECURITY OFFICER: All rise.

03:21:03 15 (Recess.)

03:46:18 16 COURT SECURITY OFFICER: All rise.

03:46:19 17 THE COURT: Let's have the jury brought in,
03:46:21 18 please.

03:46:22 19 (Jury in.)

03:46:45 20 THE COURT: Please be seated.

03:46:48 21 Mr. Oliver, you may continue.

03:46:51 22 BY MR. OLIVER:

03:46:52 23 Q. Mr. Reed, just before we took the break, you were
03:46:55 24 saying that you made a correction for Mr. Perdue's
03:46:59 25 overstatement of the apportionment rate -- not the royalty

03:47:02 1 rate but the apportionment rate. What did you do first
03:47:05 2 when you were correcting that apportionment rate,
03:47:09 3 specifically with respect to the Philips -- oops, can we
03:47:19 4 have --

03:47:20 5 A. The first thing I did was perform additional research
03:47:25 6 on the Philips TV and set-top box licensing program. I had
03:47:30 7 worked with it in the past in my prior work, but I wanted
03:47:34 8 to look and see what are the patents -- what are these
03:47:36 9 patent technology clusters, what kinds of patents were
03:47:39 10 included with them. And then I also had a conversation
03:47:46 11 with Professor Stevenson about some of the categories of
03:47:47 12 these clusters.

03:47:49 13 Q. And did you prepare a slide summarizing that?

03:47:50 14 A. I did.

03:47:51 15 Q. I'll bring that up.

03:47:53 16 What does this slide show?

03:47:55 17 A. Well, this first slide is similar to one I believe you
03:47:56 18 saw earlier with Mr. Perdue that shows the pricing
03:48:01 19 information - the Euro pricing and U.S. pricing in
03:48:07 20 Columns 1 and 2. What it shows is also what I added in
03:48:10 21 Column 3 about the number of Philips patents that are
03:48:13 22 included in some of these technology clusters. And one of
03:48:16 23 the first things I saw is that the description of the
03:48:19 24 technology clusters for the patents didn't necessarily
03:48:22 25 match what Mr. Perdue relied on.

03:48:24 1 So, for example, there -- there was no technology
03:48:34 2 cluster called TV backlight and dimming, but I did see in
03:48:40 3 my investigation that there were -- there was a technology
03:48:41 4 cluster called TV display, and there were 13 Philips
03:48:47 5 U.S. patents in that cluster. And then I looked at the
03:48:51 6 patents themselves, saw that these include backlight,
03:48:55 7 dimming, power savings, brightness, contrast, digital
03:48:58 8 monitor, related patented technologies.

03:49:01 9 So it seems that at least some, if not most or all
03:49:04 10 of those patents, would be part of what used to be called
03:49:09 11 the TV backlight and dimming.

03:49:14 12 Q. Just to make sure we're clear, in the lower right, you
03:49:19 13 have 13 patents in the TV display category. And that does
03:49:23 14 not correspond to one of Mr. Perdue's categories on the
03:49:28 15 left. Is that what that's showing?

03:49:30 16 A. That's what it shows. But, again it seems like there's
03:49:34 17 some similarity or correlation because the patents -- had
03:49:38 18 patents that in their titles addressed dimming and
03:49:42 19 backlighting, but then other patents, as well, as you see
03:49:46 20 listed here on the note on the bottom.

03:49:49 21 Q. Okay. So Mr. Perdue's category of TV backlight and
03:49:52 22 dimming, you didn't list any patents next to it, but
03:49:56 23 you're -- is it -- what you're saying that you're kind of
03:49:58 24 assuming those 13 patents would be in that category based
03:50:02 25 on the way -- maybe the way he categorized them?

03:50:05 1 A. Perhaps. Well, he relies on the title of the cluster,
03:50:10 2 TV backlight and dimming. What I noted is some of the
03:50:14 3 patents that are now in a TV display category deal with the
03:50:17 4 issues of backlight and dimming. So it seems like at least
03:50:22 5 some or most of them would have perhaps in the past been in
03:50:26 6 this TV backlight and dimming category.

03:50:29 7 Q. So applying that 14 percent apportionment that
03:50:34 8 Mr. Perdue assigned to that category would relate to 13
03:50:38 9 patents, right?

03:50:39 10 A. Perhaps as many as 13. It seemed like about 10 of them
03:50:45 11 dealt with the dimming and backlighting, so I think it's at
03:50:48 12 least 10, maybe as many as 13.

03:50:51 13 Q. Okay. And did Mr. Perdue investigate the number of
03:50:54 14 patents in these categories?

03:50:56 15 A. No, he addressed the total number of patents in the
03:50:59 16 Philips program, but I show the patents in each of the
03:51:03 17 categories and then the 145 total at the bottom.

03:51:11 18 Q. And do you recall what he said about consulting with a
03:51:13 19 technical expert on these patents?

03:51:15 20 A. Mr. Perdue said he did not talk to a technical expert,
03:51:18 21 and I think his testimony was he relied on the words "TV
03:51:22 22 backlight and dimming" and viewed that to be most related
03:51:27 23 to what he was looking for which was video control, I
03:51:31 24 believe is his testimony.

03:51:31 25 Q. You may have already mentioned this and if so, just

03:51:34 1 tell me, but if you haven't, can you show us what
03:51:39 2 Mr. Perdue did with this chart to reach his 14 percent
03:51:44 3 rate?

03:51:44 4 A. Sure. I think he explained it. He took the \$0.58 per
03:51:48 5 unit, which is the price that Philips charges for this 10
03:51:53 6 to perhaps 13 patents in the TV display category, and he
03:51:57 7 divided that \$0.58 -- and if you look at the bottom, took
03:52:01 8 the total from all 16 of these clusters -- \$4.12. That is
03:52:06 9 roughly 14 percent. He uses that 14 percent for
03:52:10 10 apportionment.

03:52:10 11 Q. Do you agree with that?

03:52:11 12 A. No, I don't. I suggested that before. But more
03:52:15 13 particularly, there's -- most important that the TV
03:52:20 14 backlight and dimming -- what it used to be called, which
03:52:23 15 is now called TV display -- is inappropriate for
03:52:28 16 apportioning revenue or monitor to -- to control -- video
03:52:34 17 control technology. There's just no technical input or
03:52:37 18 support for that. And on this issue, I had a discussion
03:52:39 19 with Professor Stevenson.

03:52:41 20 Q. Okay. And does that 14 percent from that TV display
03:52:47 21 cluster have any meaningful relationship with the accused
03:52:51 22 ASUS monitors in this case?

03:52:53 23 A. There's certainly no support for that in Mr. Perdue's
03:52:57 24 analysis. And from the input I have from Professor
03:53:02 25 Stevenson, there is no support for that.

03:53:04 1 Q. Okay. I believe you said that the Philips TV --
03:53:10 2 earlier that the Philips TV patents are important. Did you
03:53:15 3 say that?

03:53:15 4 A. Yes, Philips has on its website that the major TV
03:53:21 5 brands -- manufacturers have all taken licenses to the
03:53:24 6 Philips patent in the TV and set-top box area.

03:53:29 7 Q. Okay. Is this licensing program well known?

03:53:32 8 A. Yes. As I mentioned, I've seen this program in the
03:53:38 9 past when I worked in the area dealing with monitors and
03:53:43 10 TVs, and it frequently comes up in that industry.

03:53:47 11 Q. Okay. With respect to the TV display cluster or what
03:53:52 12 we think Mr. Perdue might have called TV backlighting and
03:53:56 13 dimming, did you seek any technical expertise on what the
03:54:01 14 patents in that cluster cover?

03:54:03 15 A. Yes. I discussed them with Professor Stevenson.

03:54:07 16 Q. Okay. The Professor Stevenson that just testified
03:54:16 17 earlier today?

03:54:16 18 A. Yes, correct.

03:54:17 19 Q. Okay. And what did he tell you about those patents in
03:54:19 20 terms of the technology?

03:54:20 21 A. Well, he told me --

03:54:20 22 MR. LEE: Objection. Hearsay.

03:54:22 23 THE COURT: Sustained. Can you rephrase the
03:54:30 24 question?

03:54:30 25 BY MR. OLIVER:

03:54:30 1 Q. Did you rely upon -- why did you rely upon his
03:54:35 2 technical expertise with respect to whether certain patents
03:54:39 3 were important or not?

03:54:41 4 A. I was seeking to get information about the particular
03:54:45 5 patents that Philips had in the TV display category, and
03:54:49 6 the importance of that technology, and, in particular, how
03:54:54 7 that could compare to monitors and the Lone Star patent
03:54:57 8 technology, as well.

03:54:57 9 Q. Were any of those patents in that cluster particularly
03:55:01 10 notable?

03:55:01 11 A. Yes.

03:55:02 12 Q. How so?

03:55:02 13 A. Well, Professor Stevenson addressed that several of
03:55:09 14 these backlight and dimming -- in particular, backlight
03:55:12 15 technologies. And one patent in particular he informed me
03:55:16 16 is notable for TV manufacturing and that -- in particular,
03:55:19 17 for high-end TVs, so we can think about those as perhaps
03:55:24 18 the size of this, a lot of functionality in them and
03:55:28 19 perhaps -- prices have come down a lot, but even now they
03:55:33 20 would probably be 1,500 to \$2,000, and that this patented
03:55:40 21 technology of Philips, that includes the -- the
03:55:42 22 backlighting technology applies to the entire panel and is
03:55:46 23 notable technology.

03:55:47 24 Q. And so -- but we're talking in this case about a
03:55:54 25 technology that relates to one of many features within a

03:55:59 1 control panel that may be used versus a patent that might
03:56:03 2 relate to the entire panel on the TV. How does that
03:56:12 3 impact -- does that have an impact on the 14 percent rate
03:56:15 4 that Mr. Perdue applied?

03:56:17 5 A. Well, the impact is -- Mr. Perdue is looking for a
03:56:20 6 mechanism to come up with an apportionment percentage, and
03:56:23 7 he wants it to relate to something like video control. But
03:56:27 8 the category he's using are significant Philips patents.
03:56:33 9 And the whole approach of Mr. Perdue is impacted by where
03:56:37 10 Philips puts its patents and how many total patents Philips
03:56:43 11 has.

03:56:43 12 So if Philips has real important patents that they
03:56:46 13 put in the TV display category, then that \$0.58 royalty
03:56:52 14 would be larger because of these patents that are applied
03:56:55 15 to expensive TVs. That would support a higher royalty
03:56:59 16 rate, and that makes the 14 percent too big. So that's
03:57:02 17 really the fundamental problem is there's different
03:57:05 18 technologies in these patents that are included in a TV
03:57:09 19 display, and it doesn't really represent video control or
03:57:11 20 some apportionment of an ASUS monitor.

03:57:14 21 Q. Okay. Would there be any impact if you used the rate
03:57:19 22 in euros that is shown in Mr. Perdue's data, as opposed to
03:57:24 23 the U.S. rate?

03:57:25 24 A. Yes. And that's an example of how sensitive the
03:57:27 25 results here are to the inputs. Take the \$0.35 euro and

03:57:35 1 divide by the 392 euro, it's 9 percent. But even in the
03:57:40 2 same category, he gets 14 percent. If you use euro, you
03:57:45 3 would get 9 percent.

03:57:49 4 Q. So you prepared a slide showing your minimum correction
03:57:53 5 to that analysis; is that right?

03:57:55 6 A. Well, I believe I have a slide that shows the
03:57:58 7 calculation of the percentages that Mr. Perdue had, and it
03:58:04 8 reflects additional information that I considered in the
03:58:06 9 minimum correction.

03:58:07 10 Q. Okay. So I'll pull that slide up. Can you explain to
03:58:12 11 the jury -- give them an understanding of what this shows
03:58:16 12 and what you considered to be the minimum correction?

03:58:22 13 A. Sure. And I'll step through them and go by color codes
03:58:27 14 to try to make it easier. But basically the first part,
03:58:30 15 Column 1 is the same information we've already been talking
03:58:33 16 about. It's the U.S. price for the 16 categories with
03:58:38 17 the \$4.12 total.

03:58:39 18 And what it -- what this slide shows is the
03:58:42 19 portion of the \$4.12 royalty -- again, a Philips royalty of
03:58:46 20 the Philips particular patents, and you can see
03:58:49 21 the 14.1 percent for TV backlight and dimming, which,
03:58:53 22 again, is TV display category relating to probably 10 or
03:58:59 23 more patents, perhaps 13, but I believe certainly 10. And
03:59:03 24 it shows you some of the different portions of the \$4.12,
03:59:08 25 different percentages, depending on these different

03:59:11 1 clusters.

03:59:11 2 Q. Okay. What is the blue line?

03:59:16 3 A. So the blue line is a category that Mr. Perdue put into
03:59:20 4 his report as audio. But when you look at the patents, the
03:59:27 5 patented technology cluster is called either A/B -- A/B, or
03:59:33 6 audio/video. And this was one of the categories that I had
03:59:39 7 a discussion with Professor Stevenson about it, and there's
03:59:42 8 a note here about the Philips '928 patent.

03:59:45 9 Q. What are you pointing to?

03:59:47 10 A. Under observation, that's my observation. I note that
03:59:51 11 of those 14 patents in this category, one is the
03:59:55 12 Philips '928 patent, and I asked Professor Stevenson about
03:59:59 13 that patent.

03:59:59 14 Q. Okay. And I see you have a note there at the bottom of
04:00:04 15 the page on that patent?

04:00:04 16 A. Yes. That's the title of the patent.

04:00:06 17 Q. Can you let us know what that is?

04:00:09 18 A. Sure. The title is: Enhancement of Video Images By
04:00:13 19 Boost of Secondary Colors.

04:00:14 20 Q. Is that -- based on the information you have, is that
04:00:17 21 one technically comparable to the '435 patent here?

04:00:20 22 A. All the information I have is from Professor Stevenson,
04:00:23 23 so I basically asked that question. And he said -- well,
04:00:26 24 he can't say it's technically comparable, but that it's --
04:00:30 25 because it relates to automatic color enhancement and not

04:00:38 1 color adjustment. But then is closer in a technological
04:00:44 2 sense to the category that Mr. Perdue is trying to emulate
04:00:47 3 or measure, than the TV backlighting and dimming patents or
04:00:50 4 the TV display patents because those TV display patents
04:00:55 5 dealt with the entire panel and important technologies for
04:00:59 6 high-end TVs.

04:01:00 7 Q. Okay. What does the orange highlighting relate to
04:01:06 8 there?

04:01:06 9 A. I should finish one more point there.

04:01:09 10 Q. Oh.

04:01:10 11 A. And this is Mr. Perdue's calculation in the blue, the
04:01:12 12 first number, it's 3.2 percent. So had someone picked that
04:01:18 13 category, that technology cluster with all the 14 patents
04:01:22 14 as the apportionment rate, it would only be 3 percent.

04:01:26 15 Q. Okay. So did you pick that category to represent the
04:01:29 16 apportionment here?

04:01:30 17 A. No, I didn't.

04:01:31 18 Q. Why not?

04:01:33 19 A. Because it's -- under Mr. Perdue's approach, it would
04:01:40 20 be reasonable without any additional -- additional
04:01:43 21 information to take the average of all these 16 clusters.
04:01:48 22 It would be -- that average would be representative of what
04:01:53 23 any particular apportioned cluster, based on Philips's
04:01:57 24 approach, would give you as an apportionment rate. Because
04:02:00 25 there was no support for, you know, technol -- from a

04:02:02 1 technical standpoint, to use the 14 percent.

04:02:06 2 I think it would -- the same thing could be said
04:02:09 3 about if you chose, for example, the lowest figure, which
04:02:12 4 is in orange at the bottom, 1.2 percent. There's no
04:02:16 5 technical support for that, either. Perhaps the
04:02:19 6 audio/video category is closer to what he was trying to
04:02:24 7 achieve, but certainly it would be reasonable to both
04:02:27 8 parties to take the overall average, the 6.25 percent.

04:02:32 9 Q. Okay. And is that 6.25 percent fair for the parties
04:02:36 10 here?

04:02:37 11 A. I believe so. Again, if you accept his approach for
04:02:42 12 apportioning and not really going into the components of an
04:02:46 13 actual accused ASUS monitor based on the -- the Philips
04:02:50 14 licensing program, that would be perhaps -- and, again, I
04:02:57 15 would call it minimum correction. 6.25 might be too large,
04:03:01 16 but under his approach, it's certainly the largest
04:03:05 17 apportionment rate that should be used.

04:03:07 18 Q. And you've also been talking about Mr. Perdue's
04:03:12 19 disagreement about the royalty base. Can you give us a
04:03:16 20 brief summary of that issue?

04:03:18 21 A. Yes. And I believe there are four issues that -- that
04:03:21 22 relate to these disagreements, and I can walk -- walk
04:03:25 23 through them. I prepared a slide that addressed the four
04:03:28 24 issues.

04:03:30 25 MR. OLIVER: Can we pull that up?

04:03:31 1 BY MR. OLIVER:

04:03:33 2 Q. Can you tell us what this slide is noting?

04:03:36 3 A. Yes. The first -- the first -- this walks through the
04:03:39 4 four categories or issues, and the first one you've heard
04:03:43 5 about.

04:03:43 6 It's the difference between what Lone Star's
04:03:47 7 technical expert appears to have accused -- he talks about
04:03:53 8 135 accused devices, and I think it was noted in the
04:03:57 9 testimony, that might be 134. But in the calculation of
04:04:01 10 Mr. Perdue as to -- I believe the latest count is 228
04:04:07 11 products that occurred at different points in time -- some
04:04:11 12 of them might be 2020, some might be 2019, but overall,
04:04:16 13 there's over 220 products. That doesn't match up to the
04:04:20 14 products that were addressed by the Lone Star technical
04:04:23 15 expert.

04:04:24 16 So I've looked at the -- what the calculations
04:04:26 17 would be under my correction if it's applied to all of the
04:04:31 18 products that Mr. Perdue included versus just the ones that
04:04:35 19 appear to be accused by -- by Lone Star.

04:04:38 20 Q. Did Mr. Perdue do any type of breakouts based on 6-axis
04:04:43 21 or 3-axis?

04:04:44 22 A. No. And that is the second category I have here. You
04:04:48 23 know, it's possible that the jury may decide that
04:04:52 24 only 6-axis products might infringe, and Mr. Perdue didn't
04:04:56 25 present any calculation of what the royalty base might be

04:05:02 1 or the royalty amount would be in the event that only
04:05:07 2 the 6-axis products would be relevant to the ultimate
04:05:10 3 decision about damages.

04:05:12 4 The same could be said about 3-axis. And then
04:05:15 5 there's additional products where my understanding is they
04:05:18 6 are really haven't been identified by the technical expert
04:05:21 7 for Lone Star as either 3-axis or 6-axis. So I also
04:05:25 8 addressed that.

04:05:26 9 Q. Okay. And how about your third point there about the
04:05:29 10 notice?

04:05:34 11 A. Yeah the third point about notice date is Mr. Perdue
04:05:37 12 only used what I would call the first date, and that's the
04:05:40 13 date, February 20, 2019, and that's the date in which Lone
04:05:45 14 Star filed its complaint for patent infringement.

04:05:48 15 But my understanding is that ASUS did not receive
04:05:53 16 that complaint until about four months later. See the date
04:05:56 17 here, June 10, 2019, is when ASUS actually received notice
04:06:07 18 about it at that date. Again, this is something that
04:06:10 19 perhaps the parties disagree about, but I provided
04:06:14 20 calculations so that one can see both ways.

04:06:16 21 Q. Okay. And that's four months out of about 27
04:06:19 22 or 28 months, right?

04:06:25 23 A. Well, it becomes larger, I believe, when you go through
04:06:29 24 patent expiration.

04:06:31 25 So Mr. Perdue calculated through near the end

04:06:33 1 of 2022, so it becomes a longer time period.

04:06:37 2 Q. All right. And then what does Point 4 address there?

04:06:42 3 A. Point 4 addresses the issue that -- that the -- the
04:06:46 4 issue here relates to a method, and in order to have
04:06:53 5 damages on the units, it's my understanding from working on
04:06:56 6 these types of matters, is that you have to have evidence
04:06:59 7 of use of those units in the United States, and, in
04:07:03 8 particular, use of the method. And Mr. Perdue didn't
04:07:08 9 present any information about -- about that issue. And
04:07:12 10 then there's elements of that issue.

04:07:15 11 One is noted here, the first bullet under 4, that
04:07:20 12 ASUS sells to distributors that are located in the United
04:07:23 13 States, but those distributors are multinational companies
04:07:27 14 that, in turn, they turn around and then they ship their
04:07:31 15 monitors to their retail customers or other customers in
04:07:35 16 Canada and other parts of the Americas, sometimes in other
04:07:39 17 continents, as well.

04:07:40 18 And so those products would likely not even be
04:07:46 19 opened in the United States, let alone being used. So they
04:07:50 20 might end up in Canada, and someone may or may not use the
04:07:55 21 monitor in Canada in a way that would be found to infringe
04:08:02 22 the method patent.

04:08:02 23 And then the second aspect is what about even
04:08:06 24 products that end up in the United States, and a customer
04:08:09 25 that might have that product in California, for example,

04:08:13 1 may not ever adjust color or let alone adjust color in a
04:08:20 2 particular way.

04:08:20 3 And Mr. Perdue didn't do anything to address those
04:08:23 4 two issues. He included all the units that initially came
04:08:26 5 to the United States.

04:08:27 6 Q. Okay. And you gave me some slides that relate to
04:08:30 7 the -- each of these four points.

04:08:33 8 Why don't we move to the next slide, and can you
04:08:36 9 address the first point and what you analyzed there.

04:08:38 10 A. Yes. So for these next several slides, to make it
04:08:43 11 perhaps go faster, each of these, I performed these minimum
04:08:48 12 corrections to the royalty rate and the apportionment.

04:08:49 13 So you see in the middle in bold, ASUS
04:08:53 14 royalties -- so that would be the royalties that ASUS would
04:08:58 15 be paying in Mr. Perdue's calculation, if you have a
04:09:01 16 6.25 percent apportionment rate and then a 1.5 percent
04:09:07 17 minimally corrected royalty rate. So if we're using
04:09:10 18 Mr. Perdue's approach, where all the products would be
04:09:13 19 included -- and this is the period through today, so it's
04:09:17 20 starting 2019 through today, the royalties under his
04:09:22 21 calculation would be about half a million dollars.

04:09:25 22 But if you take out the non-accused products, the
04:09:29 23 products that Lone Star's technical expert has not
04:09:32 24 addressed, did not include on his list, then corrected for
04:09:37 25 the remaining product is the 373,000 figure there roughly.

04:09:44 1 And the last point I'll add is the 34 percent
04:09:47 2 larger, what this means is Mr. Perdue's calculation is
04:09:52 3 34 percent larger for this -- what I'm calling a
04:09:54 4 disagreement.

04:09:55 5 Q. Okay. And when you subtracted those non-accused
04:10:00 6 products, about how many products -- do you recall about
04:10:03 7 how many products that was?

04:10:05 8 A. This removed -- I believe it's 41 products --

04:10:08 9 Q. 41?

04:10:08 10 A. -- from the calculation.

04:10:09 11 Q. But today we were able to identify with Mr. Perdue
04:10:19 12 about 180 non-accused products were on the -- in the data
04:10:22 13 that he --

04:10:22 14 A. That would be -- after removing the 41 non-accused
04:10:26 15 products, I believe there's still about 180. Some of those
04:10:30 16 are products that I understand haven't been identified as
04:10:34 17 either 6-axis or 3-axis.

04:10:36 18 Q. Let's go to your next point. You gave me a slide for
04:10:44 19 Point .2.

04:10:45 20 What is this slide on? This agreement to -- can
04:10:51 21 you explain it to us?

04:10:52 22 A. Sure. Absolutely. It starts exactly the way I just
04:10:56 23 addressed it. See the \$373,000 number there, but then it
04:11:05 24 makes another adjustment, where it pulls out what the
04:11:06 25 royalties would be under Mr. Perdue's approach with these

04:11:06 1 minimum correction to these two rates if you don't include
04:11:10 2 products that are not 3-axis or 6-axis. And that removes
04:11:14 3 119,000. So now the number becomes approximately a quarter
04:11:20 4 of a million dollars, again, for the past period through
04:11:24 5 today.

04:11:24 6 Q. Okay. And what's the number at the bottom relate to?

04:11:27 7 A. The number at the bottom relates to what if only
04:11:31 8 the 6-axis products that have been accused, which are those
04:11:36 9 ProArt monitors, that what would happen if only -- if this
04:11:40 10 calculation of Mr. Perdue's was performed to only the
04:11:42 11 revenue of the ProArt monitors, which there are nine of
04:11:45 12 them, and, see, it's approximately \$11,000 in total
04:11:50 13 royalties for the period through today.

04:11:53 14 Q. Okay. Did you investigate the marketing information
04:11:55 15 about the 3 or 6-axis products?

04:11:58 16 A. I did. I looked at information from the website, how
04:12:02 17 -- the product specifications -- I say website, I should be
04:12:08 18 clear, the ASUS websites -- for the product specifications,
04:12:11 19 and I also looked at the user manual or a selection -- I
04:12:16 20 think it was 12 monitors that I looked at, ASUS monitors.

04:12:19 21 Q. Okay. And let me pull up your slide on that.

04:12:22 22 Is this the right slide that discusses some of
04:12:25 23 that analysis?

04:12:25 24 A. It is. This comes from my expert report, Tab 4. Note
04:12:30 25 at the bottom that there are additional notes I had on

04:12:33 1 this, and I tried to make it a little easier to read. So
04:12:38 2 it doesn't have all the notes on that report tab. But it
04:12:41 3 shows the 12 models. It shows that he's accounted for
04:12:46 4 30 -- 36 percent of the revenue -- of all the revenue
04:12:50 5 Mr. Perdue included. So these would also represent about
04:12:53 6 -- about 36 percent of any damage calculation, if they were
04:12:57 7 all included in that calculation.

04:12:59 8 Q. Okay. You've got a blue box and a green box
04:13:08 9 highlighted there. Can you take each of those and explain
04:13:11 10 to us what they're -- what they're referring to?

04:13:12 11 A. Yes. And actually I would start before that.

04:13:15 12 There's a column that says ASP Q1 2020. So that's
04:13:20 13 the average price. And you can see the price ranges from
04:13:25 14 \$91 from the second from the bottom to \$782 for -- for the
04:13:32 15 PA328Q. So there's a big price different here.

04:13:37 16 And then next to that, there's a column that
04:13:40 17 should -- that shows the number of display features that
04:13:43 18 were listed in the product specs, so different types of
04:13:46 19 features that -- that are being mentioned. And then we
04:13:51 20 have -- and that's the -- really the first part of the
04:13:54 21 green area you asked me about.

04:13:56 22 So these are what are in the specifications on the
04:14:00 23 website for each of the products, and I highlighted some of
04:14:04 24 that information, display features, display colors, and,
04:14:08 25 again, you can see the ProArt. The \$782 monitor has a

04:14:16 1 billion colors.

04:14:19 2 Next to that, there are video features that are
04:14:22 3 listed on the specification, and, again, they range from
04:14:24 4 3 to 13 different additional video features that are talked
04:14:28 5 about.

04:14:29 6 And then I have a little section that I call color
04:14:32 7 video features mentioned, and, this, again, was -- I was
04:14:35 8 looking at the advertisement, seeing what's said about --
04:14:40 9 about video -- color video features, and, in particular, I
04:14:43 10 was focused on the color adjustment.

04:14:46 11 So of these 12 monitors, two specifically said
04:14:51 12 something about color adjustment. And they, in fact,
04:14:54 13 talked about 6-axis. They were the PA, ProArt monitors,
04:15:00 14 the two of them, that accounted for about .7 percent of all
04:15:04 15 the revenue that Mr. Perdue includes. Again, this is just
04:15:07 16 the two on this chart. There are other ProArt monitors.

04:15:10 17 Q. Okay. How many?

04:15:12 18 A. I think I mentioned a moment ago, there were nine that
04:15:17 19 I'm aware of.

04:15:17 20 Q. Nine that are -- you're talking about nine accused
04:15:20 21 products, right?

04:15:21 22 A. Nine accused ProArt products, yes.

04:15:24 23 Q. Okay. And what percentage of the total revenue that
04:15:29 24 Mr. Perdue used do those account for?

04:15:32 25 A. All of those ProArt monitors account for about 2

04:15:36 1 percent of the total revenue.

04:15:37 2 Q. Okay. That's not 2 percent each? That's all nine
04:15:41 3 lumped together are 2 percent?

04:15:42 4 A. Absolutely. All the numbers together about 2 percent.

04:15:46 5 Q. Okay. And then how did you determine the revenue for
04:15:48 6 the 6-axis, the 3-axis, the non-accused -- the other
04:15:52 7 monitors that you summarized earlier?

04:15:54 8 A. Well, that was easy. I was able to use the same data
04:15:58 9 source that Mr. Perdue had. I looked at the time period
04:16:01 10 that was relevant, added all the revenue. So I had added
04:16:05 11 all those 220-plus products that had revenue during the
04:16:10 12 time period that was relevant.

04:16:12 13 And I was able to categorize, for example, all the
04:16:16 14 PA monitors because I could see which ones are PA.

04:16:19 15 With respect to the 3-axis issue, I got input from
04:16:22 16 counsel for ASUS. And they identified for me which of
04:16:26 17 these had been identified by Lone Star to be 3-axis
04:16:29 18 products.

04:16:30 19 So with that information, I could compare it to
04:16:34 20 the model numbers, group them all as to -- as 3-axis
04:16:38 21 products, come up with a -- calculate the subtotals for
04:16:41 22 these different categories.

04:16:43 23 Q. Let me take you away from this slide for just a second.

04:16:48 24 Do you recall this morning we did a couple of
04:16:51 25 demonstrations on the screen with an Excel spreadsheet

04:16:55 1 where we changed the data that was shown while Mr. Perdue
04:16:58 2 was testifying?

04:17:01 3 A. Yes, I am aware of that.

04:17:04 4 Q. Was that --

04:17:04 5 THE COURT: Mr. Perdue, I'm sorry to interrupt
04:17:08 6 you. I think the mic you are holding is about to go out.

04:17:12 7 Would you -- Mr. Oliver, if you will give him
04:17:14 8 yours, put that one back in this charger, and then use the
04:17:15 9 podium mic, we should be okay.

04:17:18 10 MR. OLIVER: Okay. I think this one is dead,
04:17:21 11 also.

04:17:30 12 THE COURT: If you could -- if you will just use
04:17:32 13 the podium mic as much as you can.

04:17:45 14 (Discussion off the record.)

04:17:47 15 THE COURT: Tell you what, Mr. Lee, could the
04:17:51 16 witness use yours? Yes, let's do that instead. What we
04:17:55 17 were getting out of that mic earlier was just not
04:18:00 18 satisfactory.

04:18:02 19 And then, Mr. Lee, for objections, if you will
04:18:03 20 just stand up.

04:18:05 21 MR. LEE: Certainly.

04:18:06 22 THE COURT: Thank you.

04:18:08 23 BY MR. OLIVER:

04:18:08 24 Q. So that spreadsheet that we were showing this morning,
04:18:11 25 is that part of the data that you reviewed on -- in terms

04:18:14 1 of sales?

04:18:15 2 A. Yes.

04:18:16 3 Q. And do you recall that Mr. Perdue said that it would
04:18:21 4 have been difficult to separate out the non-accused
04:18:24 5 products from that spreadsheet?

04:18:26 6 A. I believe he testified something to that effect, yes.

04:18:29 7 Q. What do you think about that?

04:18:30 8 A. Well, it would surprise me. Certainly it wasn't
04:18:33 9 difficult for me. When you have the data, especially when
04:18:36 10 you get it electronically, sometimes in this business you
04:18:40 11 get paper and sometimes you can't even read that paper.
04:18:44 12 Here we have electronic information, so it's relatively
04:18:47 13 easy to get the right time period, put all the products
04:18:51 14 together, sort them, classify them.

04:18:56 15 And then another step would just be in the case of
04:18:58 16 the non-accused, look for those products that Lone Star and
04:19:02 17 its technical expert have identified as accused, put a
04:19:05 18 little flag in that they're accused, and then you would
04:19:08 19 summarize them that way, as well, so it's very easy to do.

04:19:11 20 Q. Okay. Do you think he would have been able to do it in
04:19:13 21 the seven months since he received your report in October?

04:19:17 22 A. Well, actually it would be easier for him because when
04:19:21 23 he received my report, I provided tables in my report that
04:19:25 24 showed that categorization. So he could have just checked
04:19:28 25 my work and make sure I didn't make any errors, and he

04:19:31 1 would have those answers.

04:19:32 2 Q. Okay. And move to your next slide. You made a slide
04:19:36 3 here about correcting the notice date. What does that do
04:19:39 4 to the overall calculation?

04:19:40 5 A. Yeah. So this shows that -- again, there are two
04:19:44 6 columns here. Both of them go through today. The first
04:19:49 7 column has Mr. Perdue -- well, Mr. Perdue's initial all
04:19:55 8 included products with that minimum correction of the
04:19:58 9 royalty rate and the apportionment rate. And the column
04:20:02 10 next to that takes all these figures I've already talked
04:20:06 11 about and changes them to reflect the change in the notice
04:20:09 12 date. So instead of using the date in February 2009 to
04:20:13 13 start damages associated with notice, we would be using at
04:20:16 14 the -- the later date, which is June 10th, 2019.

04:20:21 15 Q. And, again, here you've broken out the six -- the
04:20:25 16 nine 6-axis products to show their report -- portion of the
04:20:28 17 revenue at the bottom?

04:20:29 18 A. That's correct. So each of these categories I have
04:20:32 19 been addressing, I show the result for each of them. And
04:20:36 20 you can see overall the reduction is between 10
04:20:39 21 and 15 percent, somewhere in that range.

04:20:41 22 So that's the -- to the extent that this
04:20:44 23 disagreement between the parties improperly includes an
04:20:49 24 earlier period before ASUS received notice, then it would
04:20:52 25 be overstating damages for the period through today of 10

04:20:57 1 to 15 percent, depending on which categories.

04:21:00 2 Q. Okay. Let me go to your -- you had four points. Let
04:21:09 3 me pull up the slide on your fourth point, and can you
04:21:13 4 explain to us a little bit about your analysis here and why
04:21:15 5 that impacts the overall number?

04:21:17 6 A. Sure. And I won't repeat the background here because
04:21:20 7 we already addressed it, but in the larger font on this
04:21:24 8 slide, it addressed the research that I performed about
04:21:26 9 some of the large ASUS customers.

04:21:28 10 Q. So let's just take one of those, for example. Ingram
04:21:37 11 Micro, what do your notes there represent?

04:21:39 12 A. So Ingram Micro, on its website, talks about the fact
04:21:42 13 that they sell in 160 countries. They have distribution
04:21:48 14 centers in the United States -- throughout the United
04:21:50 15 States, but it includes one in -- one near Buffalo, New
04:22:02 16 York. Buffalo, New York, of course, is close to Toronto,
04:22:02 17 Canada. So that would be one of the places where they
04:22:04 18 could easily supply to their retail customers in Canada.

04:22:09 19 So it's an example of the likelihood that ASUS's
04:22:12 20 customers, who are known to be distributing their products,
04:22:17 21 the products that they resell throughout the world and
04:22:21 22 certainly Canada and other locations in the Americas, that
04:22:24 23 the likelihood that those products are not going to be used
04:22:28 24 in the United States. And the big point here on the
04:22:30 25 differences is that Mr. Perdue didn't do any analysis of

04:22:35 1 what might happen, and Lone Star didn't get discovery about
04:22:40 2 where these distributors might send their products.

04:22:44 3 Q. But we don't actually know how many products stay in
04:22:50 4 the U.S. We don't know if it's 100 percent, 50 percent,
04:22:58 5 or 5 percent that go to any of these particular
04:23:01 6 distributors and eventually end up being used in the United
04:23:04 7 States?

04:23:04 8 A. Correct. We don't have that information. And as I
04:23:07 9 mentioned a moment ago, nothing was done by Lone Star or
04:23:10 10 its damage expert to even try to estimate what that might
04:23:13 11 be.

04:23:13 12 Q. Okay. Have you ever corrected color on a monitor?

04:23:26 13 A. No. I've had about six monitors in the last four years
04:23:30 14 or so. I've never adjusted color. Certainly not color at
04:23:36 15 all, let alone using some kind of particular R, G, or B.

04:23:41 16 Q. Okay. Sorry to go off track. I was just a little
04:23:46 17 curious there.

04:23:49 18 So did you or Mr. Perdue make any reductions in
04:23:53 19 your calculations to account for potential sales outside of
04:23:59 20 the United States by these distributors?

04:24:01 21 A. No. Mr. Perdue doesn't even mention it. I mention it
04:24:06 22 in my report, but all my calculations do not make a
04:24:11 23 reduction for products that might go to Canada or South
04:24:16 24 America or even, again, other places overseas. And that's
04:24:19 25 in part why I say this is a maximum correction. This is

04:24:22 1 another reduction that should apply, but I'm not making
04:24:29 2 that further reduction.

04:24:31 3 Q. Okay. Let me bring up -- you gave me a summary slide
04:24:37 4 that applies to all of them. And can you summarize -- just
04:24:43 5 give us an overview of these, and is this the final result
04:24:47 6 that you came to?

04:24:48 7 A. Well, it's the final result with respect to what we've
04:24:50 8 been addressing. And, yes, so it applies the 6.25 percent
04:24:57 9 apportionment rate, 1.5 royalty rate. I think a minute ago
04:25:01 10 I might have said maximum correction, but it's just a
04:25:03 11 minimum correction.

04:25:06 12 Then it shows two time periods. One is the past
04:25:11 13 to today, and then the other is tomorrow through the patent
04:25:15 14 expiration, which are the two time periods that Mr. Perdue
04:25:17 15 addressed. And you can see the figures here. For all the
04:25:21 16 products, we're taking out the non-accused products. We're
04:25:25 17 focusing on those products that are 3-axis or 6-axis and at
04:25:28 18 the bottom is 6-axis only.

04:25:35 19 Q. Okay. Couple of issues left. Did you do a
04:25:38 20 side-by-side comparison of Mr. Perdue's revenues for ASUS
04:25:43 21 versus the existing agreement with Acer?

04:25:47 22 A. Yes. I analyzed information from Acer annual reports
04:25:53 23 and ASUS annual reports. Those annual reports describe
04:25:57 24 their sales of display products and their sales in North
04:26:01 25 America or the Americas. So I was able to use that public

04:26:06 1 information to do analysis of Acer and ASUS.

04:26:09 2 Q. I'm going to bring up a slide you gave me that kind of
04:26:14 3 summarizes this. Would you go over that and explain what
04:26:18 4 it represents?

04:26:18 5 A. Yeah. So we have the license agreement between Lone
04:26:22 6 Star and Acer, and I mentioned as public information that's
04:26:27 7 available. And it's also -- (audio drop) -- comes out of
04:26:32 8 that agreement between Lone Star and Acer.

04:26:36 9 So what -- what one can do -- and, in fact,
04:26:40 10 Mr. Perdue attempted to do this -- one can calculate the
04:26:45 11 implied royalty rate by comparing the Acer payment to Lone
04:26:52 12 Star, the royalty payment to Lone Star, divided by all of
04:26:55 13 the units that would apply for Acer under what that license
04:27:01 14 agreement covered, which would go through patent
04:27:10 15 expiration.

04:27:11 16 I can do that and calculate a per unit royalty
04:27:15 17 that would be associated with that dollar amount paid to
04:27:16 18 Lone Star as the lump-sum royalty over the units from -- in
04:27:20 19 the case of Acer, it would be late 2015 through the patent
04:27:25 20 expiration in late 2022.

04:27:28 21 Q. Okay. And what are the -- how did Mr. Perdue calculate
04:27:42 22 the unit royalty rate that he applied to Acer? And let me
04:27:47 23 pull up -- you gave me a slide on that so we can use it.

04:27:49 24 A. Sure. So Mr. Perdue did his calculation, and I'll
04:27:52 25 explain what he said about it in his report. He -- he

04:27:56 1 claimed that Acer paid to Lone Star and Lone Star received
04:28:00 2 \$285,000. He claimed that the units that were applicable
04:28:03 3 for Acer were 464,484 monitor units. And so he did the
04:28:14 4 calculation I just described, and he got \$0.61 per unit.
04:28:20 5 So then he compared that to what he claimed was his royalty
04:28:23 6 rate and calculated for ASUS, based on his 2.3 percent
04:28:26 7 royalty rate and 14 percent apportionment. He says it was
04:28:33 8 \$0.60, then it went down to \$0.57, and his overall
04:28:37 9 conclusion is down there on the bottom in red. This
04:28:42 10 supports the reasonableness because Acer, for his
04:28:42 11 calculation, paid \$0.61, so it supports what he did for
04:28:47 12 ASUS.

04:28:49 13 Q. Okay. And you prepared a slide with the errors that
04:28:53 14 you found on that?

04:28:54 15 A. Yes.

04:28:55 16 Q. Okay. I'm going to pull that up, and would you walk us
04:28:57 17 through that?

04:28:58 18 A. Sure. So I'm going to be talking about the correction
04:29:02 19 column that I just added. The first point is Lone Star did
04:29:07 20 not receive \$285,000, from the best anyone can tell from
04:29:14 21 the license agreement. License agreement states that Lone
04:29:17 22 Star would receive 80 percent, \$281,250, and that means
04:29:26 23 that Lone Star received \$225,000.

04:29:32 24 The difference is the Taiwanese tax. Taiwan is
04:29:35 25 one of the few countries that I've seen that applies a tax

04:29:39 1 to intellectual property license agreements. And so this
04:29:42 2 is kind of like thinking -- when I go and buy my Ford truck
04:29:48 3 and I pay \$30,000, Ford gets \$30,000. They don't get the
04:29:55 4 extra \$3,000 in taxes that I paid. So what Lone Star got
04:29:59 5 is 225,000 to the penny dollar amount after these Taiwanese
04:30:06 6 taxes.

04:30:07 7 Q. And the next --

04:30:09 8 A. Would you like me to continue?

04:30:11 9 Q. Yes, please.

04:30:13 10 A. So the next problem is the license agreement between
04:30:16 11 Lone Star and Acer talk about 464,484 units. That
04:30:23 12 agreement was entered into approximately December 2016.
04:30:27 13 What Acer got, they got rights to the '485 patent, but they
04:30:33 14 also got rights to other patents that Lone Star had, and
04:30:37 15 importantly, outside the United States. But they got
04:30:41 16 rights for those patents forever. Lone Star got the
04:30:46 17 \$225,000, but Acer got rights for these -- all those
04:30:51 18 patents I just mentioned through the patent expiration.

04:30:57 19 So 464,000 units of -- clearly it covers this
04:31:01 20 period from late 2015 when Acer was sued through late 2016.
04:31:07 21 Mr. Perdue -- I would say forgot, but he didn't change it
04:31:12 22 when I pointed this it out in my report, so he must not
04:31:16 23 have considered it to be important -- that Acer would have
04:31:20 24 additional units in 2017, 2018, 2019, 2020, 2021, to
04:31:26 25 approximately October -- late October 2022.

04:31:31 1 And Acer and ASUS are very similar companies.
04:31:36 2 They -- they sell products in the United States. They sell
04:31:40 3 gaming monitors. They sell a lot of monitors and other
04:31:45 4 products like -- like notebook computers, handheld gaming,
04:31:52 5 things as well.

04:31:53 6 So when I looked at the annual reports, I could
04:31:57 7 see that the two companies have similar sales trends when
04:32:01 8 you compare them to one another. And all indications would
04:32:04 9 be that Acer would continue to be selling monitor products
04:32:08 10 through -- through 2022.

04:32:11 11 Q. And how do you know that Acer is still selling
04:32:15 12 monitors? How do you know that Acer is still selling
04:32:19 13 monitors in the United States?

04:32:20 14 A. Well, one of the things I did is I looked at the
04:32:26 15 complaint -- or it might have been an agreement, but either
04:32:29 16 the complaint or the agreement between Lone Star and Acer,
04:32:31 17 and it identified products that Lone Star had accused. So
04:32:35 18 these are Acer monitors with particular model numbers that
04:32:41 19 were accused of infringing.

04:32:43 20 And so I researched those monitors and found out
04:32:46 21 that those monitors are still being sold. Acer, of course,
04:32:50 22 has many other monitors, but those are examples of
04:32:53 23 specifically accused products that continue to be sold.

04:32:56 24 Q. Okay. As you apply the correction, what is the
04:33:04 25 resulting price per -- royalty per unit if you apply the

04:33:10 1 data that you have?

04:33:12 2 A. Sure. It's the same math, taking the corrected royalty
04:33:15 3 payment to Lone Star, divided by the units. And when I
04:33:18 4 calculated the units, I didn't apply any growth. I just
04:33:22 5 took the same units for roughly a year and continued that
04:33:25 6 through 2022. The calculation results in \$0.07 per unit
04:33:32 7 rather than the \$0.61 that Mr. Perdue calculated.

04:33:35 8 Q. And if you apply that -- if you apply that correction
04:33:37 9 to Mr. Perdue's calculation, again -- I'm sorry, how does
04:33:42 10 that affect the analysis?

04:33:45 11 A. Sure. What it indicates is that rather than supporting
04:33:48 12 Mr. Perdue's conclusion about the \$0.60 and the \$0.57, it
04:33:54 13 indicates that his calculation, using his methodology and
04:33:59 14 those errors I pointed out, about eight times -- more than
04:34:02 15 eight times overstatement.

04:34:04 16 Q. And you've been sitting here in the courtroom all week
04:34:08 17 listening to the testimony, right?

04:34:10 18 A. I have been, yes.

04:34:11 19 Q. And you heard mention that at one point Lone Star had
04:34:16 20 sued Barco and then settled with Barco?

04:34:20 21 A. Yes.

04:34:21 22 Q. Were you retained in that case, as well?

04:34:23 23 A. Yes. The -- Barco, a company in Belgium, hired me to
04:34:29 24 do a similar analysis to -- to critique and correct -- and
04:34:34 25 correct the analysis that Mr. Perdue did in his damage

04:34:37 1 report against Barco.

04:34:39 2 Q. And did you reach a similar result in that case, as
04:34:42 3 well?

04:34:42 4 A. Yes. It's very similar, and I have a slide that shows
04:34:47 5 this, as well.

04:34:47 6 Q. Okay. Let me pull up your slide. Would you explain
04:34:51 7 what you did in the Barco case?

04:34:53 8 A. Sure. So in that case, even though the products were
04:34:56 9 different, Barco sells movie projectors. Basically if you
04:35:01 10 go to a movie theater and a movie is being projected on the
04:35:05 11 screen, those -- Barco is a significant supplier of such
04:35:10 12 equipment. And nevertheless, even though the product is
04:35:13 13 different, it's a lot more expensive, different kinds of
04:35:17 14 technology, Mr. Perdue did the same thing. He used the
04:35:21 15 same methodology, 2.3 percent royalty rate. Same
04:35:22 16 apportionment methodology, 14 percent allocation. He
04:35:25 17 calculated total royalties of \$1.13 million.

04:35:31 18 So I applied the same correction that I've already
04:35:35 19 addressed with you, used the 1.5 percent royalty rate, the
04:35:39 20 6.25 percent apportionment rate. I also adjusted some
04:35:43 21 forecasts that Mr. Perdue did because he -- he projected
04:35:50 22 large, ongoing sales. And Barco was having trouble because
04:35:58 23 during the pandemic, people weren't going to the movie
04:36:00 24 theaters and movie theaters weren't buying new projectors.

04:36:05 25 But in any event, based on my corrections of his

04:36:09 1 methodology, I calculated \$273,000, approximately, as the
04:36:12 2 total royalty amount.

04:36:13 3 Q. Okay. And so just -- I want to make sure we're clear.
04:36:19 4 So Mr. Perdue said Barco should pay Lone Star
04:36:23 5 \$1.13 million?

04:36:25 6 A. Correct.

04:36:26 7 Q. And then Barco actually paid \$135,000?

04:36:30 8 A. Yes. And we heard that in testimony this week.

04:36:36 9 Q. Okay. So how does that compare -- that difference
04:36:40 10 compare with your analysis of the other royalty corrections
04:36:44 11 in this case?

04:36:45 12 A. You can see it quite clearly here at the bottom.

04:36:48 13 Mr. Perdue's number was over eight times larger than --
04:36:52 14 than this payment.

04:36:55 15 And mine -- my calculation was actually larger,
04:36:58 16 but it's consistent with what I was doing. I was talking
04:37:01 17 about a minimum correction. So \$273,000 was -- was kind of
04:37:08 18 the largest amount from this minimum correction, and it
04:37:11 19 makes sense that it would be above that \$135,000 ultimate
04:37:17 20 payment to Lone Star.

04:37:18 21 Q. Okay. I'm sure the jury will be relieved to hear this.
04:37:21 22 Let's move on to your final slide.

04:37:27 23 And I'm going to ask, did you prepare -- did you
04:37:30 24 calculate the reasonable royalties based on 7 cents per
04:37:34 25 unit that you mentioned?

04:37:35 1 A. I did, yes.

04:37:36 2 Q. Okay. And can you explain that to us here?

04:37:39 3 A. Yeah. So I did this calculation for Mr. Perdue's net
04:37:44 4 sales figure, all the units that were included, even if
04:37:48 5 they weren't specifically addressed by the technical expert
04:37:52 6 of Lone Star. That's what you see in the top line,
04:37:55 7 that 7 cents per unit for all of those products. The past
04:38:02 8 amount is \$181,000, roughly. The future amount is
04:38:08 9 \$138,000. And, by the way, that future amount is not
04:38:11 10 discounted to the present value. If anyone knows about
04:38:15 11 financial modeling, future amounts, to view them as of
04:38:18 12 today, need to be reduced.

04:38:22 13 But he didn't make that adjustment. I don't
04:38:26 14 either. I just note it's probably too large for that
04:38:28 15 reason, if you view it as he now talks about as a lump sum.

04:38:29 16 Then I take out the non-accused products, and the
04:38:32 17 remaining products, again, for the past, total royalties at
04:38:36 18 7 cents are 126,241, and for this future period, 7 cents
04:38:46 19 per unit, it's \$93,474.

04:38:55 20 Q. Okay. And just a couple of -- and this calculation
04:38:58 21 here, that's based on the assumption you have to make that
04:39:00 22 every single product infringes, right?

04:39:03 23 A. Right. So this doesn't make any adjustments, as I
04:39:07 24 addressed before, for products that may never end up in the
04:39:11 25 United States or that may never have any kind of adjustment

04:39:13 1 of color using the accused method.

04:39:17 2 Q. Okay. And do you recall in Mr. Perdue's slides that he
04:39:21 3 presented to the jury, did he ever present the number of
04:39:25 4 units sold?

04:39:28 5 If you don't recall, that's fine.

04:39:29 6 A. I don't recall.

04:39:30 7 Q. Okay. Now, there is a situation in which the jury
04:39:40 8 potentially could find infringement but might be limited by
04:39:44 9 the law to only awarding one unit of sales for each type of
04:39:49 10 product. If that situation were to apply, is that 7 cents
04:39:54 11 per unit a fair royalty rate to apply?

04:39:59 12 A. At 7 cent per unit, that would apply to --

04:40:03 13 Q. Each --

04:40:04 14 A. One unit for each category of product or each model
04:40:09 15 number?

04:40:09 16 Q. Yes.

04:40:10 17 A. Well, I would view that as a legal issue. But 7 cents
04:40:13 18 per unit would certainly be a reasonable royalty on a -- on
04:40:19 19 a per unit basis over all.

04:40:22 20 Q. Thank you, Mr. Reed.

04:40:24 21 MR. OLIVER: I'm going to pass the witness.

04:40:26 22 THE COURT: Cross-examination.

04:40:34 23 CROSS-EXAMINATION

04:40:39 24 BY MR. LEE:

04:40:45 25 Q. Good afternoon, Mr. Reed.

04:40:47 1 A. Good afternoon.

04:40:48 2 Q. Your testimony just now about the Acer analysis, are
04:40:55 3 you opining that the reasonable royalty rate that should be
04:40:59 4 applied should be 7 cents per unit?

04:41:04 5 A. I am suggesting that a -- that 7 cents per unit, given
04:41:09 6 the facts of this case, would be a reasonable royalty, yes.

04:41:13 7 Q. And that's based on your analysis of the Acer license
04:41:18 8 agreement between Lone Star and Acer?

04:41:21 9 A. I would say it's an extension of the analysis that
04:41:26 10 Mr. Perdue did with the corrections, but, yes, it's -- it's
04:41:30 11 looking at the agreement between Lone Star and Acer and
04:41:34 12 looking at the implied royalty over the entirety of that
04:41:39 13 agreement.

04:41:39 14 Q. In fact, Mr. Perdue didn't use the Acer agreement to
04:41:46 15 come up with his reasonable royalty rate. He testified
04:41:51 16 yesterday that he went through the Georgia-Pacific factors,
04:41:55 17 and with respect to the Acer license agreement, he
04:41:59 18 considered it, but because it was a litigation license, he
04:42:04 19 did not factor that in, in his royalty rate determination.

04:42:14 20 You're doing something entirely differently,
04:42:18 21 aren't you?

04:42:18 22 A. No, I disagree. And also, you've addressed what
04:42:20 23 Mr. Perdue was doing yesterday and maybe part of this
04:42:22 24 morning, not what he did in his report.

04:42:25 25 I showed a slide that shows what he did in his

04:42:28 1 report. He calculated the 61 cents. He compares that to
04:42:37 2 what he gets if he converts his royalty to a per unit
04:42:41 3 royalty, which was 60 cents and then the 57-cent figure,
04:42:47 4 and he pointed it out and said this supports my analysis
04:42:52 5 and my approach.

04:42:53 6 And then I pointed out in my report that there was
04:42:54 7 an error, and it was really 7 cents under his own analysis,
04:42:58 8 and then he seemed to backtrack on it yesterday.

04:43:00 9 Q. Earlier, you testified that the six PA monitors was
04:43:05 10 roughly .2 percent of the overall revenue that's in this
04:43:13 11 disputed period, correct?

04:43:14 12 A. You said .2?

04:43:16 13 Q. Sorry. 2 percent. About 2 percent.

04:43:19 14 A. Yes, it's about 2 percent.

04:43:21 15 Q. So the -- Mr. Perdue's calculation of the net revenue
04:43:24 16 for all the products, which includes the six -- or the nine
04:43:28 17 PA monitors is about \$883 million. Do you remember hear --
04:43:35 18 him testifying to that?

04:43:37 19 A. Sorry. I didn't -- I was following you, and then you
04:43:40 20 said 883, and you were associating it with the PA. You're
04:43:44 21 talking about all the revenue from all the products that
04:43:47 22 Mr. Perdue includes?

04:43:49 23 Q. Including the nine PA products was \$883 million.

04:43:52 24 A. Including the PA and including his forecasts out
04:43:56 25 through 2022.

04:43:56 1 Q. So if we multiply \$883 million by 2 percent, the
04:44:15 2 revenue for PA products during this period will be about
04:44:19 3 \$17.6 million?

04:44:20 4 A. Well, that's kind of the average math. I think there's
04:44:23 5 a problem with that average math.

04:44:25 6 Q. Let me finish, please.

04:44:25 7 A. Sure. Sure.

04:44:27 8 Q. Applying Mr. Perdue's apportionment of 14 percent and
04:44:33 9 then multiplying that by 2.3 percent royalty rate, do you
04:44:40 10 know what number I get? It's \$56,000.

04:44:49 11 A. 56 -- that sounds about right.

04:44:51 12 Q. So I think that's -- your earlier slide, 22, had the
04:45:12 13 total amount at roughly \$20,000 under your view?

04:45:18 14 A. I don't see the slide, but that would be consistent
04:45:22 15 because my belief is that he's overstated the figures by at
04:45:28 16 least 5 times, up to 13 times. So that -- your calculation
04:45:32 17 used his 14 percent and his 2.3 percent. So it would be
04:45:36 18 overstated by about 5 times. I think that sounds like it
04:45:39 19 matches your math.

04:45:40 20 Q. Earlier, you had that nice graphic, that slide with the
04:45:46 21 companies that you worked for -- have done work for.

04:45:49 22 A. Yes.

04:45:49 23 Q. And I think you mentioned Sony, Panasonic, Vizio, LG,
04:45:57 24 and some of the monitor companies that you've been retained
04:46:00 25 in the past, and, obviously, you're working for ASUS, as

04:46:04 1 well. I don't see any small companies on that list. Do
04:46:10 2 you do any work for small companies?

04:46:13 3 A. Absolutely, I do, yes.

04:46:14 4 Q. What's your hourly rate in this case?

04:46:16 5 A. My hourly rate is \$625 per hour.

04:46:20 6 Q. How many hours have you worked on this case from the
04:46:23 7 beginning of being retained by ASUS until today?

04:46:30 8 A. I don't know that, but I can tell you the total amount
04:46:33 9 that our firm has billed ASUS, starting back in 2020
04:46:38 10 through -- let's see, we're now in May, through April 30th,
04:46:45 11 that was 40 -- approximately \$40,000.

04:46:47 12 Q. Do you know how much has been unbilled?

04:46:50 13 A. The unbilled amount would be my work this month and
04:46:55 14 that would be principally -- you saw me sitting here in
04:46:58 15 this trial -- would be principally the time this week.

04:47:02 16 Q. Has any of your expert opinions in the past been
04:47:24 17 excluded by a Court?

04:47:25 18 A. I work on very large matters, and there's often cases
04:47:29 19 where parts of my opinions are challenged, and there have
04:47:32 20 been occasions where small part -- small parts of what's in
04:47:35 21 my report I wasn't allowed to address at trial. But I've
04:47:38 22 always been allowed to provide my analysis, my results, and
04:47:43 23 provide complete aspects of all of my testimony.

04:47:46 24 Q. So is the answer yes or no?

04:47:49 25 A. I think the way you asked the question -- it's a

04:47:54 1 complicated issue. The way you asked it, yes.

04:47:58 2 Parts of my reports, like, for example, addressing
04:48:02 3 a particular license agreement -- out of 10 license
04:48:05 4 agreements, three license agreements I'll be instructed by
04:48:09 5 the Court not to address those three license agreement.
04:48:14 6 That's an example of what happens in very large patent
04:48:17 7 infringement cases.

04:48:17 8 Q. Are there any other examples in which a Court has
04:48:23 9 excluded your opinion?

04:48:24 10 A. I don't believe it's fair to say the Court's excluded
04:48:27 11 my opinion. I think it's fair to say there are issues
04:48:30 12 that -- that the Court would say, for legal reasons, you
04:48:34 13 can't address that issue.

04:48:35 14 Like one example of that is the hypothetical
04:48:41 15 negotiation date. We heard about that sometime in 2013 in
04:48:46 16 this particular case. Sometimes things are very
04:48:49 17 complicated because there might be an additional
04:48:53 18 infringement date, and then later a settlement takes place
04:48:57 19 because of a different litigation, and then because of that
04:49:01 20 different litigation, there might be a different date in
04:49:04 21 which the first infringement might happen. These are
04:49:08 22 complex legal issues, and sometimes there's been rulings in
04:49:11 23 that regard, as well, regarding my testimony, or at least
04:49:14 24 what's in my report.

04:49:15 25 Q. Were you retained as an expert in the Alarm.com case?

04:49:25 1 A. Yes, I was. It was Alarm.com versus SecureNet.

04:49:44 2 Q. Is it true that the Court there excluded your opinions
04:49:49 3 that are inconsistent with a starting date of -- a starting
04:49:54 4 date for lost profits recovery and excluded your opinions
04:49:58 5 on damages with respect to that?

04:50:02 6 A. It sounds like you're addressing one of the legal
04:50:05 7 issues that I mentioned.

04:50:06 8 Q. I'm --

04:50:07 9 A. The date -- the date in which lost profits could begin,
04:50:11 10 again, that was a complicated --

04:50:14 11 MR. LEE: Objection, nonresponsive, Your Honor.

04:50:17 12 THE COURT: Can you just rephrase the question
04:50:20 13 once or restate the question once?

04:50:24 14 BY MR. LEE:

04:50:25 15 Q. Did the Court there exclude your opinions with respect
04:50:28 16 to the starting date for lost profits recovery?

04:50:37 17 A. It's a hard question to answer, yes, no, but there was
04:50:43 18 a limited exclusion with respect to this point you're
04:50:47 19 mentioning, the date when you would start calculating the
04:50:50 20 damages, which is a legal issue.

04:50:53 21 Q. As to what the Court wrote, are you disputing the
04:50:58 22 Court's opinion?

04:50:59 23 A. No. I always will respond to opinions like that by the
04:51:04 24 Court with the utmost respect.

04:51:05 25 Q. The Court also wrote there on another topic that the

04:51:11 1 Court therefore concludes that Mr. Reed's failure of
04:51:15 2 other's analysis shall be excluded as to the failure of
04:51:20 3 other factors but may use for the licensing factor of
04:51:24 4 secondary consideration.

04:51:25 5 Did that happen in that case?

04:51:27 6 A. I believe that's true. It was relating to an issue --
04:51:31 7 kind of a technical issue about the failure of others to be
04:51:34 8 able to achieve what the patent achieved and related all to
04:51:38 9 patent damages.

04:51:38 10 Q. Is the Court in that case also found that Mr. Reed's
04:51:50 11 opinion on copying is based on insufficient fact and was
04:51:56 12 excluded; is that correct?

04:51:56 13 A. That's my recollection, as well, yes. Again, relating
04:51:58 14 to the issue of whethers others copied the patented
04:52:01 15 approach.

04:52:01 16 Q. And that opinion was written in January of 2018; is
04:52:05 17 that right?

04:52:05 18 A. I don't recall exactly the date, but that's possible
04:52:10 19 that that's the date.

04:52:11 20 Q. Now, in June of 2019, another court excluded your
04:52:21 21 opinions, this time on damages; is that right?

04:52:23 22 A. And I -- that wouldn't be consistent with my
04:52:26 23 understanding. I've always been permitted to provide my
04:52:32 24 opinions on damages.

04:52:32 25 Q. In this case, the Court wrote: Mr. Reed, TC Tech's

04:52:36 1 damages expert, takes three separate approaches to
04:52:40 2 estimating a reasonable royalty. For the following
04:52:45 3 reasons -- I'm skipping some of the language -- for the
04:52:48 4 following reasons, Sprint's motion is granted with respect
04:52:52 5 to Approaches 2 and 3.

04:52:54 6 Did the Court do that?

04:52:56 7 A. I believe the Court did do that, and Court also did
04:52:59 8 something similar with the opposing expert. I think it was
04:53:02 9 three of his four approaches.

04:53:04 10 Q. So two out of three of your damages opinions in that
04:53:07 11 case was excluded by the Court in Delaware?

04:53:14 12 A. Were in Delaware excluded, yes, two of the approaches
04:53:17 13 and allowed the third approach. So the third approach is
04:53:20 14 allowed, which means I'm able to testify in court on that
04:53:24 15 issue.

04:53:24 16 Q. But the Court in Delaware in the same case in October
04:53:26 17 of 2019 excluded another part of your damages opinion; was
04:53:32 18 that correct?

04:53:32 19 A. Same case?

04:53:42 20 Q. The June 2019 opinion came from the TC Tech case in the
04:53:47 21 District of Delaware, and I'm also reading an opinion in
04:53:50 22 October of 2019 by the same court, excluding another aspect
04:53:54 23 of your opinion. You don't remember being excluded a
04:53:57 24 second time?

04:53:58 25 A. No. I have no awareness of that, but that case still

04:54:05 1 hasn't gone the trial. But my understanding is I am
04:54:09 2 preparing to -- to testify on my damages report for the
04:54:14 3 principal methodology that I used.

04:54:18 4 MR. LEE: Objection. Nonresponsive, Your Honor.

04:54:21 5 THE COURT: Can you restate the question and give
04:54:26 6 him a chance, and then if he doesn't limit his answer, I'll
04:54:33 7 strike his response and you can ask a different question.

04:54:37 8 MR. LEE: Thank you, Your Honor.

04:54:38 9 BY MR. LEE:

04:54:39 10 Q. Isn't it true the Court in the Delaware case excluded
04:54:43 11 your opinion a second time?

04:54:47 12 A. Not aware of that.

04:54:49 13 Q. I'm reading from an opinion offered by the judge in
04:54:55 14 that case in October of 2019, about four months after the
04:55:02 15 first exclusion. This time the Court writes: TC Tech's
04:55:10 16 damages expert, Mr. Brett Reed, took three separate
04:55:13 17 approaches on -- to estimating a reasonable royalty. In my
04:55:16 18 June 18, 2019 Daubert opinion, I granted Sprint's motion to
04:55:22 19 exclude Mr. Reed's testimony as to Approaches 2 and 3.
04:55:26 20 Sprint's motion appeared to be limited to the first
04:55:29 21 subsection of Approach 2, and I likewise limited my
04:55:34 22 opinion. Sprint now requests I similarly exclude the
04:55:38 23 second subsection of Approach 2.

04:55:40 24 Later down the conclusion, the Court states: For
04:55:43 25 the above reasons, Sprint's motion to strike the

04:55:49 1 supplemental opinions of Mr. Bates on the doctrine of
04:55:54 2 equivalents and Sprint's request to exclude Mr. Reed's
04:55:59 3 Approach 2 on damages, the opinion is granted.

04:56:03 4 Any reason to doubt the Court's analysis in that
04:56:04 5 case?

04:56:05 6 A. I don't doubt the Court's analysis in that case, but
04:56:08 7 this has nothing to do with the third approach, which is
04:56:11 8 the approach that I'm continuing to work on for what
04:56:15 9 ultimately will be a delayed trial. I think that had to do
04:56:20 10 with one of the other approaches, and there was some legal
04:56:24 11 issue between Sprint and TC Tech about that.

04:56:29 12 MR. LEE: Objection. Nonresponsive, Your Honor.

04:56:31 13 THE COURT: Sustained.

04:56:31 14 BY MR. LEE:

04:56:58 15 Q. ASUS is your client in this case. Did you talk to them
04:57:00 16 about -- about licensing?

04:57:04 17 A. About licensing?

04:57:06 18 Q. Yeah. To figure out what the royalty rate should be in
04:57:10 19 this case?

04:57:10 20 A. No. As I testified, I corrected Mr. Perdue's analysis.

04:57:17 21 Q. Who told you to correct Mr. Perdue's analysis?

04:57:19 22 A. It's actually myself. When I saw Mr. Perdue's
04:57:27 23 analysis, I evaluated that the most appropriate approach
04:57:32 24 would be to correct his errors. That should have fallen
04:57:38 25 under his own approach.

04:57:39 1 Q. That's not what you write in your report, sir. You
04:57:44 2 wrote: Due to the fundamental problems underlying the
04:57:49 3 foundation of the approach and the analysis in the Purdue
04:57:52 4 report, I have been asked to focus my work on two specific
04:57:57 5 tasks.

04:57:58 6 Who asked you to perform these two specific tasks?

04:58:02 7 A. It would be counsel for ASUS, as well as counsel for
04:58:05 8 Barco -- my input.

04:58:10 9 Q. So your analysis was not independent. You were told by
04:58:13 10 counsel, find flaws, criticize Mr. Perdue's report?

04:58:18 11 A. I wouldn't agree with that interpretation, but
04:58:26 12 certainly I wrote in my report that I was asked by counsel
04:58:30 13 to -- to make corrections to the errors.

04:58:32 14 Q. Were you here earlier when Dr. Stevenson testified that
04:58:43 15 users were not sophisticated to use the controls on these
04:58:51 16 display devices?

04:58:52 17 A. I was here for that testimony.

04:58:55 18 Q. Do you agree with his opinion?

04:58:57 19 A. Well, he will have much more experience with color
04:59:01 20 issues, monitor issues. But I think it's certainly not
04:59:08 21 unreasonable to think that some customers would not be
04:59:12 22 sophisticated in that way.

04:59:14 23 Q. Mindful of time, I'm going to try to wrap this up
04:59:19 24 quickly.

04:59:19 25 Did you ask whether ASUS had any licenses that

04:59:25 1 were relevant to the technology at hand in this case?

04:59:35 2 A. By the time that I was involved, ASUS had already
04:59:38 3 produced several license agreements in response to a
04:59:41 4 request for relevant license agreements, so those had
04:59:43 5 already been provided.

04:59:45 6 MR. LEE: Objection. Nonresponsive, Your Honor.

04:59:47 7 THE COURT: Sustained.

04:59:48 8 BY MR. LEE:

04:59:53 9 Q. Did you know that Microsoft and ASUS entered into a
04:59:57 10 licensing agreement in October of 2015?

05:00:02 11 A. I don't recall.

05:00:07 12 Q. There's an article that says that. Is there any reason
05:00:10 13 for you to dispute that?

05:00:12 14 A. Perhaps you can show me the article, but certainly my
05:00:16 15 experience with Microsoft and PC manufacturers is that
05:00:21 16 Microsoft has a lot of agreements with ODMs and computer
05:00:29 17 manufacturers.

05:00:31 18 Q. ASUS also entered into a license agreement with Sisvel
05:00:36 19 in 2018. Have you ever seen that agreement?

05:00:40 20 A. I haven't seen that agreement, but I'm aware of -- of
05:00:47 21 news releases or information that address that agreement.

05:00:50 22 Q. And it says down here that Sisvel is a world leader in
05:00:54 23 managing intellectual property and maximizing the value of
05:00:59 24 patent rates with companies in Italy, United States, Hong
05:01:04 25 Kong. A big company, right?

05:01:07 1 A. You're reading me that. I'm actually not aware of that
05:01:11 2 company, other than what I saw referenced in this
05:01:14 3 particular case.

05:01:14 4 Q. Are you aware that Philips and ASUS -- you know,
05:01:21 5 Philips of the Philips table that we've been talking about,
05:01:25 6 entered into a licensing arrangement with ASUS?

05:01:30 7 A. I am. And not surprising, given Philips's patent
05:01:34 8 program.

05:01:35 9 Q. In this article, it goes on to state that: ASUS
05:01:45 10 admitted that Philips was entitled to injunctive relief and
05:01:50 11 offered to pay damages for past infringement at a FRAND
05:01:54 12 rate of \$0.75 per infringing the device. Philips, however,
05:01:59 13 argued that it was not sufficient, and the amount of
05:02:04 14 damages owed was to be decided at the FRAND trial.

05:02:04 15 That's the context of the agreement between
05:02:09 16 Philips and ASUS?

05:02:10 17 A. Contents of the agreement or --

05:02:12 18 Q. Context.

05:02:12 19 A. Context. Yes, and if you would permit me, I could
05:02:16 20 address what it means to have a FRAND rate.

05:02:24 21 Q. Your counsel can do it -- do that on redirect.

05:02:26 22 Were you here earlier when Dr. Ducharme testified
05:02:29 23 about there's 135 product families?

05:02:31 24 A. Yes.

05:02:33 25 Q. Earlier today your counsel prepared an updated Tab 17

05:02:44 1 and 15. Did you assist in preparing that?

05:02:49 2 A. You said counsel prepared?

05:02:51 3 Q. Your attorneys -- sorry -- sent over an updated Tab 17
05:02:56 4 and 15 of your expert report. Are you aware of that?

05:02:59 5 A. Yes.

05:03:07 6 Q. In that, there's display products. You also list them
05:03:11 7 by types. Are you aware that some of these, what you call
05:03:22 8 non-accused products -- for example, a VG monitor that
05:03:27 9 Dr. Ducharme has analyzed and considered that as part of
05:03:30 10 his, you know, expert opinion that it infringes?

05:03:37 11 A. He's claiming that there's products with similar
05:03:39 12 numbers that he thinks are part of that family?

05:03:43 13 Q. Correct.

05:03:45 14 A. I'm not aware of testimony from Dr. Ducharme in that
05:03:48 15 regard. He addressed, I believe, it's 134 product --
05:03:55 16 accused devices of a term. I think in his testimony he
05:03:58 17 also talked about perhaps 160 products.

05:04:03 18 Q. Yesterday or a couple days ago, counsel, in questioning
05:04:12 19 Dr. Ducharme, said (as read):

05:04:13 20 Thank you, sir. I want to talk to you about --
05:04:16 21 switch topics here, and I want to talk to you about the
05:04:19 22 accused ASUS devices, okay? We talked about -- you talked
05:04:23 23 earlier about there being displays at issue. My question
05:04:26 24 is how many types of accused product families have been
05:04:30 25 accused in the matter?

05:04:31 1 Answer: 135.

05:04:35 2 So he's not talking about products but product
05:04:38 3 families, correct?

05:04:41 4 A. That's confusing, but as I mentioned, he -- earlier in
05:04:45 5 his testimony, he talked about, I believe, a list of 135
05:04:52 6 accused products, but then he also talked about -- I
05:04:55 7 believe it was 160 or maybe 161 products. So it wasn't
05:05:00 8 clear, but it certainly wasn't more than about 160 or 161.

05:05:06 9 Q. Last couple of questions.

05:05:08 10 Earlier you were making the -- and on your slides
05:05:11 11 you had some products that were shipped from ASUS to
05:05:19 12 customers would be, might be, could be, shipped abroad. Do
05:05:24 13 you remember that?

05:05:27 14 A. Yes. I don't know if I said might be, should be, but I
05:05:32 15 was addressing specifically that we have these worldwide
05:05:38 16 distributors headquartered in the U.S., who are receiving
05:05:41 17 product from ASUS. That's all known. These worldwide
05:05:45 18 distributors say that they sell product around the world,
05:05:48 19 and sometimes they have a distribution center near Canada.
05:05:53 20 So I'm just addressing that Mr. Perdue did not address that
05:05:57 21 issue.

05:06:05 22 Q. Back in December, one of ASUS's Taiwan's employees was
05:06:10 23 deposed, and several questions was asked of him.

05:06:15 24 (As read): Does ASUSTeK sell to other companies
05:06:18 25 besides ASUS Computer International, and do those products

05:06:26 1 end up making it to the United States?

05:06:28 2 His answer: Well, we would also sell to our
05:06:31 3 subsidiaries in China and India, Europe, and also Russia,
05:06:36 4 et cetera.

05:06:39 5 Next question was: And while -- and the products
05:06:43 6 that you sell to China, India, Russia, they may make it
05:06:48 7 back into the United States?

05:06:52 8 Answer: I don't know. However, the shipping cost
05:06:57 9 is expensive. Who would sell the products from Russia to
05:07:01 10 the United States?

05:07:03 11 Does it make sense that products from ASUS get
05:07:07 12 shipped back to the United States -- shipped to the United
05:07:11 13 States and shipped back out?

05:07:14 14 A. Absolutely it makes sense with respect to Canada and
05:07:17 15 the Americas because, there again, you have a distribution
05:07:22 16 center near Buffalo, New York, who are very close to
05:07:31 17 Montreal and Toronto. So absolutely it makes sense, and I
05:07:36 18 could discuss more, if you like.

05:07:38 19 MR. LEE: I have no more questions, Your Honor.

05:07:40 20 THE COURT: Redirect?

05:07:42 21 MR. OLIVER: Thank you.

05:07:44 22 REDIRECT EXAMINATION

05:07:46 23 BY MR. OLIVER:

05:07:48 24 Q. Mr. Reed, Mr. Lee asked you about some sort of royalty
05:07:53 25 rate called a FRAND rate?

05:07:56 1 A. Yes.

05:07:56 2 Q. What does FRAND stand for?

05:07:58 3 A. What does FRAND stand for?

05:08:01 4 Q. Do you know what it stands for?

05:08:02 5 A. Yes. It's associated with standard -- what are called
05:08:06 6 standard essential patents. And FRAND is a fair and
05:08:12 7 reasonable royalty rate that would be associated with
05:08:14 8 requirements of companies who get their patents included as
05:08:20 9 standard essential patents for an underlying product. What
05:08:23 10 that means is you need that patent to be able to -- to
05:08:28 11 manufacture a product under the standard.

05:08:30 12 So because of that standard essential process,
05:08:34 13 what is typically required by the associations that monitor
05:08:39 14 the standard that gets applied is they require the FRAND
05:08:50 15 royalty rate to be known across the industry.

05:08:52 16 Q. And by standard, you're talking about something like
05:08:57 17 standard size of a plug that everybody has in their house
05:09:00 18 or a standard WiFi unit that can connect to anybody's phone
05:09:07 19 or computer or a standard color of paint for highways or
05:09:11 20 something like that that everybody has to use or everybody
05:09:14 21 should use; is that right?

05:09:16 22 A. Typically in its the electronic space because there's a
05:09:19 23 lot of complexity and a lot of patents that go into
05:09:24 24 something like a monitor. And often the industry will
05:09:27 25 agree and say we want this particular approach to how --

05:09:29 1 you know, how the monitor will operate so that everybody in
05:09:32 2 the industry can manufacture parts like that MediaTek
05:09:35 3 chipset. Everybody in the industry can manufacture parts
05:09:39 4 in a way that follow the standard, and that same
05:09:42 5 manufacturer can use those parts for their product.

05:09:47 6 Q. Does that have any relation to this case?

05:09:50 7 A. No, not at all.

05:09:58 8 Q. The documents that Mr. Lee mentioned that were sent to
05:10:03 9 ASUS this morning, he implied that they were created by me.
05:10:10 10 Did any of the lawyers have anything to do with the
05:10:12 11 creation of those documents?

05:10:14 12 A. No. These were updates of previous tabs that were in
05:10:20 13 my expert report. And the only reason why I even modified
05:10:23 14 them this week is because Mr. Perdue changed his
05:10:26 15 calculation. Before he went through March 15th, now he
05:10:31 16 went through March 20th [sic]. So I just updated the
05:10:35 17 calculations to have that same change, May 20th.

05:10:40 18 Q. Do you recall when we found out that those updated
05:10:43 19 calculations would be allowed in this trial?

05:10:45 20 A. Monday night, I believe, around 6:30 p.m.

05:10:48 21 Q. That was when he submitted them, right?

05:10:51 22 A. Yes, that's my understanding is that they were
05:10:54 23 submitted by, I guess, Lone Star after trial on Monday.

05:11:00 24 Q. And do you recall when the Court actually allowed them
05:11:03 25 to be spoken about?

05:11:05 1 A. That was yesterday morning.

05:11:06 2 Q. Okay. So between yesterday morning and this morning

05:11:10 3 you were able to update your figures to address

05:11:13 4 Mr. Perdue's new calculations?

05:11:17 5 A. I started the process probably the day before, to try

05:11:22 6 to be prepared just in case, but I think it was in the last

05:11:27 7 couple of days.

05:11:27 8 Q. Okay. Do you recall that I called you to ask you if

05:11:31 9 you would work for ASUS on this matter?

05:11:33 10 A. Yes, I do recall.

05:11:34 11 Q. And what did I ask you to do with Mr. Perdue's report?

05:11:38 12 A. Well, my recollection -- I'm not sure I recall

05:11:42 13 precisely, but I believe it was to analyze the report

05:11:47 14 and -- and see what would be a proper method for addressing

05:11:52 15 it.

05:11:54 16 Q. And did I suggest the approach that you take on that?

05:11:58 17 A. No. I believe I discussed it with both you and with

05:12:02 18 Barco's counsel once -- once I started the analysis and

05:12:06 19 looked at what Mr. Perdue did. And then later on, it was

05:12:10 20 addressed. But my recollection is that I addressed that as

05:12:15 21 a potential proper approach on my part.

05:12:18 22 Q. Okay. And so just to be clear, you chose the approach

05:12:22 23 to respond, not -- not the lawyers, right?

05:12:25 24 A. I believe that's fair to say, yes.

05:12:27 25 Q. Okay. Did -- Mr. Lee brought out a bunch of decisions

05:12:39 1 from -- actually it was about three decisions from courts
05:12:44 2 about excluding some small portion of your testimony; is
05:12:48 3 that right?

05:12:48 4 A. Yes, I believe that's what he addressed. He didn't
05:12:50 5 really give me much of a chance to respond or explain.

05:12:54 6 Q. Okay. And --

05:12:56 7 A. I'm sorry.

05:12:56 8 Q. Sorry. You have testified in, what, how many cases?

05:13:00 9 A. Well, this issue involves more than testimony because
05:13:03 10 it involves -- any time there's an expert report.

05:13:06 11 Q. So how many cases have you submitted expert reports on?

05:13:11 12 A. Probably well over 100 for patent cases.

05:13:15 13 Q. Okay. And he was able to point to about three of those
05:13:20 14 where some portion of your testimony was excluded?

05:13:23 15 A. That's what he appears to address. You know, I think
05:13:26 16 there's -- I have a good response to that issue I didn't
05:13:29 17 get a opportunity to address.

05:13:31 18 Q. I don't think we really need to go into that a whole
05:13:35 19 lot, but if you did the math, about 97 percent of the time
05:13:39 20 the Court allows you to give your full testimony; is that
05:13:39 21 right?

05:13:41 22 MR. LEE: Objection, Your Honor.

05:13:49 23 THE COURT: Can you rephrase the question?

05:13:51 24 MR. OLIVER: Yeah.

05:13:53 25 BY MR. OLIVER:

05:13:53 1 Q. If you did the math, what percentage of the time would
05:13:56 2 the Court allow you to do your -- give your full testimony?
05:13:59 3 A. I would view it as essentially 100 percent because I've
05:14:06 4 always been permitted to provide full opinions of my
05:14:09 5 analysis. Just that maybe 3 percent of the occasions,
05:14:11 6 there were portions that I was not able to address. And in
05:14:13 7 my view, much of that relates to legal issues.

05:14:16 8 Q. Has your testimony ever been excluded in the Eastern
05:14:22 9 District of Texas?

05:14:22 10 A. Certainly not excluded. Whenever I come to the Eastern
05:14:29 11 District of Texas, I have always presented my opinions.
05:14:32 12 There was one example of this complex case I mentioned
05:14:35 13 before, a case in Marshal and it had -- it was like --

05:14:37 14 MR. LEE: Objection. Narrative, Your Honor.

05:14:41 15 THE COURT: Can you break it up a little bit,
05:14:44 16 Mr. Oliver?

05:14:45 17 BY MR. OLIVER:

05:14:45 18 Q. So you mentioned a case in Marshal. What happened in
05:14:48 19 that case?

05:14:48 20 A. There was an initial case, and I was working with the
05:14:51 21 Plaintiff. So in the initial case, the jury concluded and
05:14:54 22 agreed with my calculation to the dollar. Then there was a
05:14:58 23 subsequent case. The subsequent case had to do with these
05:15:02 24 products that were -- that were covered by the first case.
05:15:07 25 But because the Plaintiff in that case, SynQor, was paid

05:15:11 1 the damage amount that I had testified about, that does
05:15:16 2 something called a license or implied license to those
05:15:21 3 previous units because of payments made and a damage award
05:15:25 4 that covers those products.

05:15:28 5 So it made a very complex issue about -- and I
05:15:32 6 view it as a legal issue -- a complex legal issue about the
05:15:36 7 next trial. And so there was a ruling in a very limited
05:15:39 8 way on that second part.

05:15:40 9 Q. Okay. Prior to today, has your testimony been -- your
05:15:45 10 report or your testimony been challenged at all in this
05:15:48 11 case between Lone Star and ASUS?

05:15:51 12 A. No. And I don't think they challenged my testimony.
05:15:55 13 They just started trying to challenge my reputation to and
05:15:59 14 somehow have these rulings against my prior opinions.

05:16:03 15 MR. LEE: Objection. Narrative, nonresponsive.

05:16:06 16 THE COURT: Can you break it up, please?

05:16:11 17 MR. OLIVER: Okay.

05:16:11 18 Your Honor, I believe that Plaintiff has opened
05:16:16 19 the door, and I would like to ask a question about the --
05:16:18 20 an issue that was addressed with respect to Mr. Reed while
05:16:21 21 the jury was out of the room in this Court. Am I permitted
05:16:25 22 to do that when we looked at his report?

05:16:29 23 THE COURT: You're going to have to help me.

05:16:33 24 MR. OLIVER: The objection that Mr. Lee made that
05:16:35 25 we --

05:16:35 1 THE COURT: With respect to the slides that we --
05:16:40 2 Mr. Lee?

05:16:41 3 MR. LEE: I'm not sure what Mr. Oliver is getting
05:16:45 4 at.

05:16:46 5 THE COURT: Yeah, so --

05:16:47 6 MR. OLIVER: I don't want to cause a mistrial by
05:16:50 7 asking a question about --

05:16:51 8 THE COURT: No, I don't want you to either. My
05:16:53 9 recollection was there was an objection to a slide, and I
05:16:56 10 overruled that objection. Am I misremembering?

05:17:01 11 MR. OLIVER: That's the -- that's what happened,
05:17:02 12 and I just -- that was outside of the presence of the jury,
05:17:04 13 but it has to do with the door that's been opened to
05:17:08 14 challenges to Mr. Reed's testimony.

05:17:09 15 THE COURT: Okay. Well, let's just -- why don't
05:17:13 16 you proceed carefully, and we'll see if it draws an
05:17:17 17 objection.

05:17:17 18 BY MR. OLIVER:

05:17:17 19 Q. So do you recall today when the jury was out of the
05:17:20 20 room there was an objection to some of your testimony to
05:17:24 21 your slide?

05:17:25 22 A. There was objection to two bullets.

05:17:27 23 Q. Just answer very carefully here because we don't want
05:17:31 24 to cause any problems. Was there an objection to -- by
05:17:34 25 Lone Star to your slide that you wanted to present?

05:17:37 1 A. Yes.

05:17:38 2 Q. And the Court --

05:17:38 3 MR. LEE: Objection. Relevance, Your Honor. It
05:17:41 4 was already overruled.

05:17:43 5 THE COURT: Let's just proceed.

05:17:44 6 MR. OLIVER: Okay.

05:17:45 7 BY MR. OLIVER:

05:17:45 8 Q. The Court ruled on that?

05:17:47 9 A. Yes.

05:17:48 10 Q. And did the Court exclude any portion of what you
05:17:51 11 wanted to present?

05:17:51 12 A. No.

05:17:51 13 Q. Thank you.

05:17:53 14 MR. OLIVER: Pass the witness.

05:17:55 15 MR. LEE: We have no further questions,
05:17:57 16 Your Honor.

05:17:57 17 THE COURT: Okay. You may step down.

05:17:59 18 THE WITNESS: Thank you, Your Honor.

05:18:03 19 THE COURT: Call your next witness.

05:18:05 20 MR. OLIVER: The Defense rests, Your Honor.

05:18:08 21 THE COURT: Okay. Is the Plaintiff going to call
05:18:10 22 any rebuttal witnesses?

05:18:12 23 MR. BENNETT: We're not, Your Honor.

05:18:14 24 THE COURT: Okay. Does the Plaintiff rest on its
05:18:16 25 entire case?

05:18:18 1 MR. BENNETT: Plaintiff rests, Your Honor.

05:18:20 2 THE COURT: All right. And does the Defendant
05:18:21 3 rest on its entire case?

05:18:24 4 MR. OLIVER: We would like to make Rule 50 motions
05:18:27 5 before presenting the case to the jury, but we rest on all
05:18:30 6 the evidence.

05:18:30 7 THE COURT: All right. Very well.

05:18:33 8 Ladies and gentlemen of the jury, thank you for
05:18:33 9 your focus and your attention throughout the day. We do
05:18:39 10 have some evidentiary and legal matters that we have to
05:18:43 11 take up outside your presence, and we're going to do that
05:18:46 12 now, of course. It's been a long day.

05:18:50 13 When you get here in the morning, the first thing
05:18:53 14 that will happen is the parties, having rested, we will --
05:18:59 15 I will instruct you on the law that you are to follow in
05:19:01 16 your deliberations. And then after that, you will hear the
05:19:06 17 attorneys' closing arguments. And then after that, you
05:19:11 18 will return to the jury room to begin your deliberations.

05:19:14 19 I -- I would ask that you all -- I'm not going to
05:19:19 20 ask you to be here by 8:45. I'll just ask you to be here
05:19:24 21 at 9:00 o'clock. And if you guys will all be here about
05:19:29 22 9:00, we'll aim to start about 9:00. And there's always
05:19:32 23 some last minute issues that have to be dealt with, with
05:19:37 24 respect to the instructions and the verdict form, but we
05:19:40 25 intend to get all of that resolved tonight after you leave

05:19:44 1 and in the morning before you arrive.

05:19:46 2 So you all be here 8:00 o'clock in the -- at 9:00
05:19:49 3 o'clock in the morning, and we'll begin with instructions
05:19:51 4 hopefully right about that time.

05:19:54 5 I hope you all have a pleasant evening. As a
05:19:57 6 reminder, don't discuss the case among yourselves or with
05:20:00 7 anyone else. Don't do any investigation or research into
05:20:04 8 the case, the parties, or the attorneys, and don't post
05:20:08 9 anything about any of the proceedings you have observed.

05:20:11 10 I'll see you in the morning about 9:00 o'clock.

05:20:15 11 COURT SECURITY OFFICER: All rise for the jury.

05:20:17 12 (Jury out.)

05:20:42 13 THE COURT: Okay. Please be seated.

05:20:48 14 All right. So we have Rule 50 motions from the
05:20:52 15 parties. We need to discuss the instructions and the
05:20:58 16 verdict form and anything else the parties wish to cover.

05:21:01 17 I do want to ask you, Mr. Oliver, I was a little
05:21:04 18 confused about what happened right there at the end. I was
05:21:08 19 not following that. I was not understanding what the
05:21:12 20 objection was. Can you help me understand what was going
05:21:15 21 on there?

05:21:18 22 MR. OLIVER: To the final -- to the final line of
05:21:20 23 questioning, Your Honor?

05:21:21 24 THE COURT: Yes.

05:21:21 25 MR. OLIVER: Yes. Mr. Lee challenged Mr. Reed on

05:21:27 1 several courts excluding his testimony and brought up
05:21:34 2 opinions from various courts and read from them and said
05:21:37 3 your testimony was excluded here and there and so on and
05:21:40 4 opened the door to whether his testimony is even
05:21:42 5 appropriate or whether it should be excluded.

05:21:44 6 So I wanted to point out that there was no
05:21:47 7 challenge made in this case before today and that there
05:21:50 8 actually was a challenge and nothing was excluded.

05:22:03 9 THE COURT: Not sure I've ever seen anything like
05:22:05 10 that, Mr. Oliver.

05:22:06 11 MR. BENNETT: We -- Mr. Lee and I had an awkward
05:22:09 12 struggle about how to deal with that. Been in a few
05:22:12 13 trials, never heard my opposing counsel in front of the
05:22:15 14 jury approach the bench on basically a limine that doesn't
05:22:20 15 exist, and talk about a mistrial, et cetera.

05:22:22 16 I don't want to -- (indecipherable) -- and I'm not
05:22:25 17 going to, but I've never seen anything like that either.

05:22:28 18 THE COURT: I've never seen anything like it. I'm
05:22:31 19 not going to fuss at you, Mr. Oliver, but it seemed like
05:22:35 20 you were definitely using what I had decided to counter the
05:22:42 21 testimony that had come in about the other exclusions of
05:22:43 22 the witness's testimony in other courts.

05:22:46 23 Candidly, I was not following what was going on,
05:22:50 24 or I would not have allowed you to do that. I don't think
05:22:54 25 it was proper, but, again, you did request me to -- to -- I

05:22:58 1 mean, you raised it, and so that's on me for not having you
05:23:03 2 all up to the bench to ensure that I completely understood
05:23:07 3 what the issue is. So --

05:23:09 4 MR. OLIVER: I tried to raise it very discreetly.
05:23:12 5 I didn't --

05:23:12 6 THE COURT: You did. And I was too slow on the
05:23:16 7 uptake, honestly.

05:23:18 8 And Mr. Lee didn't help me out, or at least in a
05:23:20 9 way that I could understand it. I should have had you all
05:23:23 10 up to the bench, but it's -- it's neither here nor there.
05:23:29 11 I just wanted to make sure I understood what had happened.

05:23:33 12 Okay. Now, Rule 50 motions. Does the Plaintiff
05:23:37 13 have a Rule 50 motion it wishes to argue?

05:23:40 14 MR. BENNETT: Yes, on their invalidity challenges.

05:23:42 15 THE COURT: All right.

05:23:43 16 MR. BENNETT: First, we wanted to move for a
05:23:44 17 directed verdict on double patenting. We don't think
05:23:49 18 that -- Your Honor knows -- I don't have to repeat the
05:23:53 19 standard. You're well aware that the standards aren't
05:23:56 20 equal when it comes to affirmative defenses of invalidity
05:23:59 21 versus infringement. Clear and convincing is the standard,
05:24:02 22 and it's quite high.

05:24:04 23 They have not met that standard, even close, for
05:24:06 24 double patenting.

05:24:08 25 I'd cite Eli Lilly 689 F.3d 1368, per cite 1378

05:24:16 1 to 79. It's a little different kind of patent, I'll grant
05:24:20 2 you, but it's a method patent all the same, and there's two
05:24:24 3 different methods involved.

05:24:26 4 The Court says you got the focus the analysis on
05:24:29 5 what's previously claimed and not previously disclosed.
05:24:33 6 Almost all of Stevenson's testimony was about what figures
05:24:37 7 showed, what was disclosed, not tied directly or limited to
05:24:42 8 what was claimed on the double patent.

05:24:44 9 On the patent itself, the earlier patent, he could
05:24:50 10 not mention how any claims had changed in between, that a
05:24:54 11 claim construction had brought them close together. He
05:24:57 12 didn't mention any of that. And the two references that he
05:25:00 13 did mention in the claim language, while they may be
05:25:03 14 similar methods, they weren't identical.

05:25:09 15 And it's -- Eli Lilly mentions if I have a method
05:25:11 16 and it's got a component that's in common and both the
05:25:16 17 prior and the subsequent patents use the same component,
05:25:19 18 then maybe you have a valid double patent challenge.

05:25:23 19 That's not this case. They have not made that
05:25:26 20 argument. The figures themselves show differences in the
05:25:30 21 methods claimed, not necessarily what's limited to what's
05:25:34 22 disclosed.

05:25:35 23 So if they have evidence of all of the double
05:25:40 24 patenting, it's not clear and convincing evidence. We
05:25:42 25 should not waste the jury's time with that question because

05:25:46 1 they cannot hope to meet that burden, that high burden.

05:25:51 2 The anticipation claim, as well, or defense, the
05:26:00 3 selecting step and identifying step, input image pixels,
05:26:03 4 the testimony on those particular steps, even if it's in
05:26:10 5 equal voice, it's not clear and convincing.

05:26:13 6 So that's mainly our argument with anticipation
05:26:16 7 and double patenting that whatever evidence there is, as a
05:26:18 8 matter of law, the jury could never conclude it's clear and
05:26:22 9 convincing.

05:26:24 10 MR. OLIVER: I'm unclear, was that all about
05:26:28 11 double patenting, or was there also a motion on
05:26:33 12 anticipation?

05:26:33 13 MR. BENNETT: It was two separate motions.

05:26:36 14 MR. OLIVER: Okay. Your Honor, the witness,
05:26:40 15 Dr. Stevenson, very clearly addressed this issue. He went
05:26:44 16 through each step of the method claim, and he showed where
05:26:48 17 in the method claims of the '012 patent the obvious -- the
05:26:57 18 limitation that rendered it obvious was found.

05:27:03 19 This is not -- this is not anticipation with
05:27:06 20 respect to the double patenting issue. It's an
05:27:10 21 obviousness-type double patenting. It doesn't have to be
05:27:13 22 verbatim. Even for anticipation, it wouldn't have to be
05:27:13 23 verbatim.

05:27:17 24 So Dr. Stevenson addressed each step and pointed
05:27:22 25 it out. The jury has ample evidence to rule on double

05:27:26 1 patenting in that regard.

05:27:27 2 With respect to the Brett reference and the
05:27:30 3 anticipation or obviousness verdict that's requested with
05:27:35 4 respect to that patent, again, Mr. Stevenson walked through
05:27:44 5 the entire claim -- the entirety of every claim and showed
05:27:48 6 where in the Brett reference the disclosure -- the
05:27:51 7 invaliding disclosure was found.

05:27:53 8 And there was also testimony and challenges to
05:27:56 9 testimony by Plaintiff's expert wherein they could only
05:27:59 10 challenge one or two small aspects of each patent, and then
05:28:05 11 they even gave testimony that it called questions upon
05:28:11 12 their challenges to the invalidity arguments. So the
05:28:14 13 evidence is clear, the jury has ample evidence to make a --
05:28:18 14 render a verdict on that issue.

05:28:19 15 THE COURT: All right. Thank you, Mr. Oliver.

05:28:27 16 Mr. Joshi, you want to go ahead and argue yours?

05:28:30 17 MR. OLIVER: So we have multiple Rule 50 motions,
05:28:35 18 Your Honor. The first one is kind of lengthy compared to
05:28:39 19 the others. So don't despair when you hear the first one
05:28:43 20 because the other ones will be much shorter.

05:28:46 21 Would you like me to present them all or to do it
05:28:48 22 one at a time?

05:28:50 23 THE COURT: Present them all.

05:28:51 24 MR. OLIVER: Okay. ASUS moves under Rule 50 for
05:28:55 25 judgment as a matter of law that Lone Star lacks standing

05:28:58 1 to bring this lawsuit. Lone Star failed to prove ownership
05:29:02 2 of the patent-in-suit, a necessary cornerstone of every
05:29:07 3 patent infringement lawsuit.

05:29:09 4 Section 261 of the Patent Act requires, quote,
05:29:12 5 applications for patents, patents, or any interest therein,
05:29:16 6 shall be assignable in law by an instrument in writing, end
05:29:20 7 quote. 35 U.S.C. 261.

05:29:23 8 This has been interpreted to require a written
05:29:28 9 instrument.

05:29:28 10 Regarding ownership of the '435 patent-in-suit,
05:29:36 11 Lone Star offered only the testimony of Mr. Rice, which
05:29:40 12 itself was inconsistent internally and is inconsistent with
05:29:43 13 the other facts.

05:29:44 14 Mr. Rice first testified that Lone Star acquired
05:29:46 15 the '435 patent from Intel. That's in the Day 1 trial
05:29:50 16 transcript at Page 134, Line 14. Mr. Rice later testified
05:29:55 17 that he himself transferred the '435 patent to Lone Star.
05:30:04 18 That's in the redirect testimony Trial Day 1, Page 150,
05:30:08 19 Line 16. The face of the '435 patent states that it is
05:30:12 20 assigned to Oplus Technologies Limited, neither Intel nor
05:30:19 21 Mr. Rice.

05:30:19 22 So there is no chain of -- no chain of transfer
05:30:23 23 from Oplus to Intel to Mr. Rice to Lone Star. Lone Star
05:30:30 24 failed to offer any document establishing that it owns the
05:30:34 25 '435 patent.

05:30:39 1 The Federal Circuit recently summarized the
05:30:42 2 well-established requirement for a written instrument as
05:30:46 3 follows -- and I'm going to quote the text from the opinion
05:30:50 4 rather than eliminate the internal citations to other
05:30:54 5 references.

05:30:55 6 In assessing whether an attempted assignment is
05:31:00 7 sufficient to transfer title or ownership, Courts must look
05:31:04 8 to whether the parties can satisfy this in-writing
05:31:06 9 requirement. Without a written assignment to satisfy
05:31:10 10 Section 261, a party who is not the inventor simply lacks
05:31:15 11 standing to bring a patent infringement suit for money
05:31:17 12 damages. Our case law in most cases reflects this
05:31:23 13 apparently inviolable rule. That's from Vapor Point, LLC
05:31:29 14 v. Moorhead, 832 F.3d 1343, Page 1351, Federal Circuit
05:31:38 15 2016.

05:31:39 16 The Federal Circuit has recognized limited
05:31:43 17 exceptions to this apparently inviolable rule where a
05:31:47 18 transfer occurs by operation of law such as by inheritance
05:31:51 19 in a will. However, Lone Star alleges that it purchased
05:31:55 20 the '435 patent, not that any automatic operation of law
05:32:01 21 was involved.

05:32:01 22 Accordingly a writing establishing ownership is
05:32:05 23 required, and no such writing is in evidence. Therefore,
05:32:07 24 Lone Star lacks standing to bring this lawsuit, and
05:32:11 25 judgment of lack of standing should be entered.

05:32:14 1 ASUS also asks the Court to enter -- issue an
05:32:17 2 order to show cause why the case should not be deemed
05:32:21 3 exceptional and ASUS awarded its attorney's fees, costs,
05:32:25 4 and expenses.

05:32:26 5 In Ranieri versus Microsoft, 887 F.3d 1298,
05:32:34 6 Federal Circuit 2018, appealed from Judge Lynn in the
05:32:37 7 Northern District of Texas, the Court affirmed an
05:32:41 8 exceptional case finding and award of fees after dismissal
05:32:44 9 for lack of standing due to failure to prove ownership.

05:32:48 10 THE COURT: Could I ask was that failure to use
05:32:50 11 ownership at -- to prove ownership at trial?

05:32:53 12 MR. OLIVER: A key -- a cornerstone component of a
05:32:55 13 patent infringement case is that you have to prove you have
05:33:02 14 ownership of the patent and have standing to bring the
05:33:04 15 lawsuit.

05:33:05 16 THE COURT: Right. And so there was never a
05:33:07 17 motion to dismiss filed in this case.

05:33:10 18 MR. OLIVER: Lone Star alleged ownership in the
05:33:13 19 complaint and -- up until trial alleged ownership and never
05:33:18 20 was able to present ownership of the patent at trial.

05:33:21 21 And we did ask the witness before they rested
05:33:25 22 their case on cross-examination whether he had provided any
05:33:28 23 written instrument showing that they owned the patent.

05:33:32 24 THE COURT: Okay.

05:33:33 25 MR. OLIVER: Next motion, ASUS moves for Rule 50

05:33:55 1 judgment as a matter of law of no contributory infringement
05:34:00 2 under 35 U.S.C. 271(c). A Plaintiff dropped its claim of
05:34:08 3 contributory infringement. So Lone Star is entitled to
05:34:09 4 judgment on its counterclaim of noninfringement with
05:34:12 5 respect to contributory infringement.

05:34:26 6 Similarly, with respect to direct infringement by
05:34:30 7 ASUS, ASUS moves for judgment as a matter of law under
05:34:33 8 Rule 50 because Plaintiff dropped its claim of direct
05:34:37 9 infringement by ASUS. So ASUS is entitled to judgment on
05:34:41 10 its counterclaim of noninfringement with respect to direct
05:34:45 11 infringement.

05:34:45 12 With respect to the remaining claim of inducement
05:34:48 13 of infringement and the acts of direct infringement
05:34:54 14 underlining that claim by others, not ASUS, that could form
05:34:58 15 a basement for inducement, ASUS first moves for judgment as
05:35:07 16 a matter of law under Rule 50 that Lone Star failed to
05:35:14 17 prove that it met -- that the ASUS products met the claim
05:35:19 18 limitation without affecting any other colors, as the
05:35:23 19 witness testified that every color could be modified and
05:35:28 20 that his -- that his application of that related to every
05:35:35 21 color.

05:35:36 22 ASUS also moves for judgment of noninfringement
05:35:44 23 with respect to every product not specifically analyzed by
05:35:48 24 the expert in this -- and addressed in this -- in his
05:35:54 25 testimony. And by the expert, I refer to Dr. Ducharme.

05:35:59 1 ASUS moves for judgment as a matter of law of no
05:36:04 2 infringement on all products that were not specifically
05:36:08 3 identified by products number by Dr. Ducharme as
05:36:12 4 infringing.

05:36:13 5 With respect to that, Dr. Ducharme showed a
05:36:16 6 demonstrative listing 135 products that he said were
05:36:20 7 accused of infringement, but there was no testimonial
05:36:25 8 evidence that lists the product numbers, and there's no
05:36:31 9 exhibit demon- -- identifying the products that are accused
05:36:35 10 of infringement.

05:36:40 11 ASUS moves for judgment as a matter of law with
05:36:44 12 respect to inducement, with respect to all products that
05:36:51 13 are sold by ASUS's distributors to end users outside of the
05:36:57 14 United States.

05:36:57 15 ASUS asserts that this must apply to all products
05:37:02 16 because there was no evidence as to which of the products
05:37:06 17 that went to directors ended up with consumers within the
05:37:10 18 United States.

05:37:14 19 ASUS moves for summary judgment -- or not summary
05:37:23 20 judgment -- judgment as a matter of law under Rule 50 on
05:37:28 21 inducement because -- because there is no proof that the
05:37:33 22 product manuals upon which the Plaintiff relies to prove
05:37:39 23 inducement were sent with the products. The testimony by
05:37:42 24 the ASUS witnesses is that the product manuals are indeed
05:37:46 25 not included in the boxes and that somebody would have to

05:37:48 1 go to the website to download those manuals, which brings
05:37:54 2 me to my next point.

05:37:57 3 There's no proof that the user -- there's no
05:37:59 4 evidence that users have downloaded the manuals for any
05:38:02 5 product. For example, there's no identification of any web
05:38:13 6 logs from ASUS showing that customers within the United
05:38:18 7 States actually downloaded those manuals.

05:38:21 8 ASUS moves for judgment as a matter of law under
05:38:27 9 Rule 50 of no inducement of infringement for each product
05:38:32 10 wherein the manual does not describe or show separate red,
05:38:38 11 green, or blue color adjustments because that is the
05:38:43 12 teaching upon which Lone Star is basing its claim of
05:38:50 13 inducement.

05:38:53 14 ASUS moves for judgment as a matter of law that
05:38:58 15 the Plaintiff take no damages prior to actual notice on the
05:39:04 16 date of service in this lawsuit, June 10th, 2019, because
05:39:13 17 Plaintiff had licensed the patent to parties, including
05:39:18 18 Acer, and there's no evidence from Plaintiff that licensed
05:39:23 19 products were marked with the patent number prior to the
05:39:26 20 date of actual notice.

05:39:29 21 ASUS moves for judgment as matter of law under
05:39:34 22 Rule 50 that no damages be taken on the non-accused
05:39:39 23 products. The testimony today showed that 180 or so
05:39:44 24 products included in Mr. Perdue's damages analysis were not
05:39:50 25 accused of infringement.

05:39:52 1 THE COURT: Can you go back to the product manuals
05:39:56 2 for just a minute?

05:39:56 3 MR. OLIVER: Yes, sir.

05:39:57 4 THE COURT: Can you actually identify for me which
05:40:00 5 product manuals you're moving for judgment as a matter of
05:40:05 6 law on?

05:40:08 7 MR. OLIVER: Well --

05:40:09 8 THE COURT: Specifically which manuals? I think
05:40:11 9 the record needs to reflect that.

05:40:14 10 MR. OLIVER: So there are manuals -- I believe
05:40:17 11 they're all in P-26-1 through P-26-139.

05:40:27 12 Those are manuals for numerous products that were
05:40:34 13 allowed into evidence over objection. And there was no
05:40:41 14 evidence that those manuals were put into products that
05:40:46 15 were shipped to customers in the United States. The
05:40:50 16 testimony was that they were downloaded by Lone Star.

05:40:52 17 THE COURT: So your objection or the ground upon
05:40:54 18 which you're moving for JMOL is as to every single one of
05:40:59 19 those --

05:40:59 20 MR. OLIVER: Yes.

05:40:59 21 THE COURT: -- product manuals?

05:41:00 22 MR. OLIVER: Yes, Your Honor.

05:41:02 23 THE COURT: Okay.

05:41:03 24 MR. OLIVER: Because the burden of proof is that
05:41:04 25 Plaintiff must show that ASUS induced consumers by

05:41:10 1 providing the inducing materials to those consumer -- or to
05:41:14 2 the -- in this case because it's a method patent, to the
05:41:17 3 end user.

05:41:18 4 THE COURT: One of your arguments, Mr. Oliver, was
05:41:20 5 that some of the manuals lacked instructions?

05:41:25 6 MR. OLIVER: Yes.

05:41:26 7 THE COURT: Which manuals lacked instructions?

05:41:29 8 MR. OLIVER: There are so many, I would have to --
05:41:32 9 I would have to come up with a list of them, but I can
05:41:35 10 provide that list before the case goes to the jury.

05:41:38 11 THE COURT: For purposes of protecting your
05:41:40 12 record, I think you should do that.

05:41:43 13 MR. OLIVER: Okay. We will do that. I can't do
05:41:46 14 that as I stand here today.

05:41:48 15 THE COURT: Of course not. Certainly.

05:41:49 16 MR. OLIVER: ASUS moves for judgment as a matter
05:41:59 17 of law under Rule 50 that damages may be awarded for no
05:42:05 18 more than one unit of each product. The law on this point
05:42:08 19 is clear and is in the jury instructions in that one can
05:42:13 20 seek judgment of inducing infringement based on
05:42:21 21 circumstantial evidence, but in a situation where a product
05:42:25 22 can be used in a non-infringing manner, the Plaintiff must
05:42:35 23 show evidence of how many users actually used the
05:42:38 24 infringing method.

05:42:39 25 In this case, the man -- the monitors can all be

05:42:42 1 used in a non-infringing manner. That would be plugging
05:42:45 2 them in and not touching the color adjustment.

05:42:48 3 Because of that non-infringing manner and because
05:42:54 4 there was no evidence by survey or by actually seeing
05:42:57 5 customers use them or presenting evidence of how many
05:43:00 6 customers used the manuals, the law requires that damages
05:43:04 7 be limited to one unit of each product. So essentially it
05:43:09 8 would be 134 total units of sales in this case.

05:43:13 9 THE COURT: Okay. Is there -- I've just not heard
05:43:17 10 that argument before. Is there -- can you tell me what --
05:43:20 11 what Federal Circuit law there is that supports that
05:43:23 12 argument?

05:43:24 13 MR. OLIVER: I can. I will need to pull it up on
05:43:27 14 my computer, but I can tell it to you.

05:43:34 15 MR. BENNETT: Your Honor, while he's doing that,
05:43:37 16 we would be happy to -- there's so many motions, I'm having
05:43:43 17 a hard time trying to keep track of them so we can respond
05:43:46 18 to them.

05:43:46 19 I would ask he put at least a list in writing so
05:43:50 20 that Lone Star will have the opportunity to actually cite
05:43:54 21 some evidence and rebut it. I don't -- otherwise, I don't
05:43:57 22 know what we're doing or what we're talking about. I mean,
05:44:00 23 I've never seen anything like this before.

05:44:03 24 THE COURT: Mr. Oliver?

05:44:06 25 MR. OLIVER: The list will certainly be in the

05:44:08 1 transcripts that we receive this evening, but I don't have
05:44:12 2 a -- I have a handwritten list right here, but --

05:44:16 3 THE COURT: I'm -- okay, well, I'll just ask you
05:44:20 4 to respond to, Mr. Bennett, as best you can. I mean, most
05:44:23 5 of this, honestly, Mr. Oliver, strikes me as summary
05:44:31 6 judgment-type issues. So it's curious to me why there were
05:44:34 7 not summary judgment motions filed on these issues.

05:44:38 8 MR. OLIVER: That was --

05:44:40 9 THE COURT: That would have saved us all -- to the
05:44:43 10 extent, you know, there was merit to any of the many issues
05:44:49 11 you've raised here, that certainly would have streamlined
05:44:52 12 the trial in a very significant way.

05:44:54 13 MR. BENNETT: Well -- sorry, Your Honor. I know
05:44:56 14 it's still his motion, but here's what my problem is.
05:45:00 15 There is a pretrial order on file under Rule 16 that
05:45:04 16 governs.

05:45:04 17 THE COURT: That's correct. So --

05:45:06 18 MR. BENNETT: So hardly any of these things he's
05:45:09 19 listing off are in that pretrial order. So what I would
05:45:13 20 like -- that's why I'm asking if we could adjourn and get a
05:45:17 21 list, we could probably do a lot of work for the Court in a
05:45:21 22 short time by comparing his list to the pretrial order.

05:45:24 23 I've been trying to keep track, and I've seen
05:45:26 24 about two issues on the list of what they listed as
05:45:30 25 contended issues of law.

05:45:32 1 THE COURT: Mr. Oliver?

05:45:33 2 MR. OLIVER: There are numerous issues that have
05:45:36 3 arisen during trial by failure -- due to failure of proof
05:45:39 4 by the Plaintiff. We didn't know --

05:45:41 5 THE COURT: Well, with respect to standing, for
05:45:43 6 example, is that the pretrial order?

05:45:44 7 MR. BENNETT: We unequivocally assert that we own
05:45:48 8 the patent, and they do not dispute it. It's admitted.

05:45:58 9 MR. OLIVER: Lone Star asserted that they owned
05:46:01 10 the patent and asserted that they would bring evidence, and
05:46:05 11 they didn't. They failed to prove --

05:46:06 12 THE COURT: The pretrial order says it's not
05:46:08 13 disputed. It was a joint filing, Mr. Oliver.

05:46:12 14 MR. OLIVER: That was based on their assertions at
05:46:15 15 the time. This is based on the evidence at trial that's --
05:46:18 16 has been presented.

05:46:19 17 THE COURT: These -- some of these motions,
05:46:22 18 Mr. Oliver, border on frivolous. I have to be candid with
05:46:28 19 you.

05:46:28 20 MR. OLIVER: Your Honor, they're all supported by
05:46:29 21 the case law and by the facts. And if needed, we can cite
05:46:34 22 them, but there is no --

05:46:36 23 THE COURT: Well, it's definitely -- it's
05:46:38 24 definitely needed.

05:46:39 25 You know, here's what I would suggest. Out of an

05:46:46 1 abundance of caution, in order for both sides to protect
05:46:50 2 their record, I think a filing needs to be made. I think
05:46:54 3 these motions should be filed in writing, and you can file
05:46:59 4 them tonight or first thing in the morning, and I will hear
05:47:03 5 short argument in the morning, or I'll explain what my
05:47:08 6 ruling is going to be in the morning before we instruct the
05:47:12 7 jury.

05:47:14 8 I'm certainly not trying to cut off anybody's
05:47:17 9 argument here today, but I do think Mr. Bennett has
05:47:20 10 filed -- has made a valid point. If these issues are not
05:47:26 11 covered in the pretrial order, then I -- I think there's a
05:47:31 12 little unfair surprise here.

05:47:33 13 And so in order to be fair for both sides,
05:47:38 14 Mr. Oliver, for you to protect your record and for
05:47:42 15 Mr. Bennett to be able to adequately respond to things that
05:47:46 16 were not raised in the pretrial order, I think that the
05:47:50 17 safest approach is to ask for the parties to file written
05:47:55 18 submissions on the docket.

05:47:57 19 MR. OLIVER: Okay. We can do that.

05:48:00 20 THE COURT: Does anybody have any concern about
05:48:02 21 doing that? I know you've got other things to do tonight.

05:48:07 22 MR. BENNETT: Your Honor, that's -- given the
05:48:09 23 number of directed verdict motions, I think that's the only
05:48:12 24 way to proceed.

05:48:15 25 I will say if I have to spend all night going

05:48:19 1 through these and they're not in the pretrial order, I
05:48:22 2 might come back asking for something because that's what
05:48:29 3 governs. That's the pleadings now. It will be Rule 11
05:48:32 4 type for me to have come back and respond to something that
05:48:38 5 we raised in the pretrial --

05:48:38 6 THE COURT: Mr. Oliver, I agree with what he's
05:48:42 7 saying.

05:48:42 8 MR. OLIVER: Your Honor, I don't think that what
05:48:43 9 he's saying is correct in that when the Plaintiff asserts
05:48:47 10 that it can prove a point at trial and then drops the
05:48:51 11 evidence on that point, things change during trial. People
05:48:54 12 say that they can -- they can prove certain points and then
05:48:58 13 they get to trial and they don't prove it. Plaintiff said
05:49:02 14 they could prove ownership -- in fact, Plaintiff actually
05:49:06 15 had some documents that apparently were never produced in
05:49:09 16 the case that were purportedly assignments or licenses to
05:49:13 17 Lone Star or something on its first exhibit list, and it
05:49:16 18 withdrew them all.

05:49:17 19 And as a -- for example, on that matter, it's a
05:49:20 20 cornerstone of every patent infringement case that you must
05:49:24 21 prove you have standing to sue on the patent. You can
05:49:29 22 plead it, you can assert it up to trial, but when you get
05:49:32 23 to trial, that's where the rubber meets the road. And
05:49:35 24 these are the type of issues that are -- that are appearing
05:49:38 25 here.

05:49:38 1 THE COURT: So I'm look at ASUS' statement of
05:49:45 2 contested issues of fact and law on Page 8 of the pretrial
05:49:47 3 order just as -- by way of example, and there was four
05:49:50 4 listed: Whether ASUS has infringed the asserted claims of
05:49:54 5 the '435 patent, that's number one; number two, whether the
05:49:58 6 claims of the '435 patent are valid and enforceable; number
05:50:02 7 three, whether ASUS had notice of allegations of
05:50:04 8 infringement of the '435 patent; and number four, whether
05:50:08 9 Lone Star is entitled to any damages for alleged
05:50:14 10 infringement by ASUS.

05:50:15 11 And it seems to me -- again, I haven't gone -- I'm
05:50:17 12 just looking at this --

05:50:19 13 MR. OLIVER: Lone Star's entitlement to damages is
05:50:22 14 directly tied to standing. Without standing, you're not
05:50:27 15 entitled to damages.

05:50:27 16 MR. BENNETT: May I respond, please?

05:50:29 17 THE COURT: Yes.

05:50:30 18 MR. BENNETT: Section M of the joint pretrial
05:50:36 19 order lists the contentions of the parties. The contention
05:50:39 20 of the parties are the pleadings now, and you have to
05:50:42 21 assert a defense to what's the contention of the parties if
05:50:46 22 you want to respond to it, and they do not.

05:50:48 23 We say we own it in Part 1 of Section M, and they
05:50:51 24 do not deny that we own it in their contentions, either the
05:50:55 25 contentions of law or the disputed contentions of fact.

05:51:00 1 Procedural divisional circuit law applies. I will
05:51:02 2 cite to Your Honor, 400 F.3d 238 at 245. It's a Fifth
05:51:08 3 Circuit case. It's right on point: Evidence or legal
05:51:10 4 theories that are not in the pretrial order are waived and
05:51:15 5 every fact is omitted that isn't challenged.

05:51:18 6 And they haven't challenged that fact. We
05:51:21 7 had 12 hours. I didn't need to waste time trying to prove
05:51:25 8 up ownership, other than get a little testimony in for some
05:51:28 9 context for the jury because they waived the issue. I
05:51:31 10 wasn't to spend time introducing documents and going
05:51:35 11 through the transfer history of the patent when I had to
05:51:38 12 get through everything else. And we feel sandbagged by
05:51:42 13 this now and after they failed to do what they were
05:51:44 14 supposed to do, it's a little galling considering all
05:51:45 15 that's happened in this case.

05:51:47 16 MR. OLIVER: I can -- I can understand why Mr. --
05:51:53 17 why my colleague would be upset that he failed to prove his
05:51:57 18 case, but --

05:51:57 19 THE COURT: Mr. -- Mr. Oliver, you're really --

05:51:59 20 MR. OLIVER: -- this is --

05:52:00 21 THE COURT: Your conduct is really getting mighty
05:52:04 22 close to the Rule 11 line. And this is not how we try
05:52:10 23 cases.

05:52:11 24 Mr. Bennett is entitled to notice of what the
05:52:14 25 issues are. Instead, to wait until the evidence has closed

05:52:18 1 or nearly closed and to raise things that frankly should
05:52:22 2 have been raised months ago is quite shocking to me. But
05:52:29 3 it is not the first shocking thing I have observed in this
05:52:33 4 trial.

05:52:33 5 At the end of the day, Mr. Bennett is entitled to
05:52:40 6 some clear delineation of exactly which grounds you're
05:52:49 7 moving on. Certainly given the disparity between the
05:52:54 8 positions you are now taking and the positions that you
05:52:59 9 have taken throughout this litigation, including what you
05:53:04 10 submitted in the agreed joint final pretrial order.

05:53:09 11 So I am going to ask that you file the JMOL
05:53:14 12 by 10:00 p.m. tonight, and I will give the Plaintiffs an
05:53:19 13 opportunity to respond by 6:00 a.m.

05:53:24 14 MR. OLIVER: Okay. Thank you, Your Honor.

05:53:29 15 THE COURT: Any concern about being able to do
05:53:31 16 that by 10:00 p.m.?

05:53:34 17 MR. JOSHI: Yeah, we were actually hoping to have
05:53:36 18 dinner tonight for -- you know, since we --

05:53:36 19 MR. OLIVER: We'll do it.

05:53:39 20 MR. JOSHI: But we'll do it. We'll do it. That's
05:53:41 21 fine.

05:53:43 22 THE COURT: All right.

05:53:45 23 Mr. Bennett, any concern about that?

05:53:48 24 MR. BENNETT: Yes, but I don't know what choice I
05:53:52 25 have, Your Honor.

05:53:53 1 THE COURT: I think the Plaintiff is entitled to a
05:53:56 2 written filing.

05:53:58 3 MR. OLIVER: Okay.

05:53:59 4 MR. JOSHI: We will do that.

05:54:01 5 THE COURT: Because it's what -- honestly, I think
05:54:05 6 is a real surprise.

05:54:07 7 MR. JOSHI: Okay.

05:54:08 8 THE COURT: All right. Jury instructions. I
05:54:11 9 think there's just a couple of disputes, and we will look
05:54:15 10 at those very quickly. I'll let you tell me what you
05:54:20 11 think. I'll tell you what I'm inclined to do.

05:54:24 12 You can try to talk me out of that, and then I'll
05:54:28 13 make a final decision tonight and give you a opportunity to
05:54:33 14 put your objections on the record.

05:54:35 15 Let's just turn briefly -- who's arguing these?

05:54:41 16 Mr. Bennett, are you arguing these for the
05:54:44 17 Plaintiff?

05:54:44 18 MR. BENNETT: Yes, Your Honor.

05:54:44 19 THE COURT: Who's arguing for Plaintiff -- for the
05:54:46 20 Defendant? Mr. Joshi.

05:54:47 21 The first thing on page 10, at the bottom on the
05:54:53 22 instruction on claim interpretation, there is some language
05:55:00 23 in a bracket with respect to the preferred embodiment issue
05:55:09 24 that came up before.

05:55:11 25 Mr. Bennett, I am not inclined to include that

05:55:14 1 additional language. There was a curative instruction that
05:55:18 2 was given. I think the jury understood it, and so my
05:55:20 3 inclination is not to include that, but I'll hear from you
05:55:25 4 about it.

05:55:26 5 MR. BENNETT: I'm not going to take too much time
05:55:32 6 arguing about it. The only reason we put it in is because
05:55:34 7 the original curative instruction mentioned that a later
05:55:39 8 instruction would follow. Whether the jury remembers that
05:55:42 9 or not, I don't know. Frankly, I probably doubt it.

05:55:44 10 THE COURT: Well, the later instruction does
05:55:45 11 follow because it says you must disregard any argument or
05:55:48 12 evidence presented by either party suggesting that the
05:55:51 13 claims mean anything other than the definitions provided in
05:55:55 14 the chart, which is, I think, what the later instruction
05:55:58 15 is.

05:55:58 16 MR. BENNETT: Fair enough.

05:56:00 17 THE COURT: Okay. Do you want -- wish to add
05:56:02 18 anything about that?

05:56:03 19 MR. JOSHI: No, Your Honor. We agree.

05:56:05 20 THE COURT: Okay. Second one, I think, is on
05:56:09 21 Page 30.

05:56:09 22 MR. BENNETT: That's right.

05:56:13 23 THE COURT: There's an argument that ASUS has made
05:56:16 24 here with respect to service of the complaint as opposed to
05:56:26 25 filing date of the complaint.

05:56:27 1 You got a case to support that, Mr. Joshi, because
05:56:32 2 it's news me. I think it's the filing of the complaint
05:56:36 3 that's the operative date under the statute.

05:56:40 4 MR. JOSHI: No, I don't have a case, Your Honor.
05:56:42 5 We'll withdraw that one.

05:56:44 6 THE COURT: All right. Very well. Resolve that
05:56:47 7 in that way.

05:56:47 8 MR. BENNETT: As an aside, Your Honor, I would
05:56:49 9 ask, that was one -- that was one -- I lost count of the
05:56:52 10 bases for a Rule 50 motion that Mr. Oliver said.

05:56:55 11 So if they've agreed to withdraw it from the
05:56:57 12 charge, I would hope not to see it in their motion that I
05:57:01 13 have to respond to by 6:00 a.m.

05:57:03 14 THE COURT: Right. Agree with that.

05:57:05 15 Okay. On the appendix, there's, I guess, some
05:57:14 16 disagreement about that. I'll just make a couple of brief
05:57:18 17 comments about the first two: hue and saturation.

05:57:23 18 I know the parties disagree about that.

05:57:27 19 Mr. Bennett, I'll tell you my inclination is to go
05:57:29 20 with the Plaintiff on this because -- I mean, with the
05:57:32 21 Defendant on this because their proposal mirrors the claim
05:57:37 22 construction order, unless there's a really good reason not
05:57:40 23 to do that. I'm looking forward to you telling me what
05:57:45 24 that might be.

05:57:46 25 MR. BENNETT: I thought our -- the only thing we

05:57:48 1 did was take the numbers out. I thought the words were
05:57:51 2 substantively the same. If they weren't, that's our fault.
05:57:57 3 All -- literally all I did was took the Attachment A that
05:57:59 4 the Defendant gave us and just tried to make it more
05:58:03 5 readable. I was worried the jury would think that the
05:58:07 6 numbers meant something.

05:58:10 7 THE COURT: Okay. Well, we may -- I think those
05:58:11 8 numbers are in the claim construction order.

05:58:15 9 MR. BENNETT: That's true. They are. And we're
05:58:17 10 not going to fight Your Honor about putting the numbers in
05:58:19 11 or out. It was just a readability thing for purposes of
05:58:22 12 the jurors. That's all we thought.

05:58:22 13 THE COURT: Yeah, we'll leave them in there.

05:58:25 14 MR. BENNETT: That's fine.

05:58:25 15 THE COURT: All right. That's the first two: hue
05:58:28 16 and saturation.

05:58:29 17 On individual color, I think the sentence that was
05:58:33 18 added there by the Defendant is not part of the claim
05:58:40 19 construction order. So my inclination is to side with the
05:58:44 20 Plaintiff on that one.

05:58:46 21 Mr. Joshi, you want to argue that one?

05:58:53 22 MR. JOSHI: Yes. Yes, Your Honor.

05:58:54 23 And so this -- this also relates to the motion
05:58:59 24 that we filed last night about clarification of claim
05:58:59 25 construction.

05:59:03 1 So what's going on is you have a definition of
05:59:06 2 individual color, then there's the -- the Court, then, on
05:59:11 3 its own says there are more issues. It's not that simple.
05:59:16 4 That's what the claim construction order says.

05:59:19 5 And then the -- then the Court talks about
05:59:21 6 individual color appearing in the selecting limitation and
05:59:23 7 then it appearing in the identifying limitation. And it
05:59:26 8 says on one of them, it has to be an exact individual
05:59:32 9 color, and on the other -- you know, now that's -- that's
05:59:34 10 been a subject of debate as to indefiniteness, not the
05:59:38 11 preferred embodiments, not limited to preferred
05:59:42 12 embodiments.

05:59:43 13 But this kind of ties in with the motion that we
05:59:46 14 filed last night that without -- without these
05:59:49 15 clarifications as to what is -- what are the metes and
05:59:51 16 bounds of this term, then it eviscerates a couple of terms
05:59:55 17 from the claims because now every pixel comes in.

05:59:58 18 Because if we just leave to it apply logic and --
06:00:00 19 and, you know, leave it up to the reader to apply the logic
06:00:11 20 to determine which pixels are in and which aren't, then
06:00:11 21 essentially all the pixels come in, and then the claim
06:00:14 22 terms just lose their meaning.

06:00:16 23 THE COURT: Anything you wish to add?

06:00:20 24 MR. BENNETT: I'm just here to talk about
06:00:22 25 Appendix A and what we should give the jury.

06:00:26 1 We responded in a brief about what we think about
06:00:29 2 their argument, and I'll leave it there.

06:00:30 3 The language has to come out because it's a
06:00:33 4 reflection of their preferred embodiment argument, which is
06:00:37 5 just wrong.

06:00:37 6 THE COURT: I agree. I'm going to side with the
06:00:39 7 Plaintiffs on this one, Mr. Joshi.

06:00:42 8 All right. I think that covers everything on the
06:00:46 9 appendix. With respect to the verdict forms, let me tell
06:00:50 10 you my thoughts about --

06:00:51 11 MR. BENNETT: Sorry, Your Honor. There's one more
06:00:53 12 issue on the appendix.

06:00:54 13 We removed having "said selected individual
06:00:58 14 color," and the Defendants included it. That's not a
06:01:03 15 construed term. It's something that the Defendants have
06:01:05 16 inserted because they continue to assert that we are
06:01:07 17 limited by the preferred embodiment, which the Court has
06:01:11 18 already said is wrong.

06:01:12 19 So they've inserted the claim term/phrase. It's
06:01:16 20 not a claim term at all. Interpreted according to the
06:01:19 21 preferred embodiments of the patent, they quote, and they
06:01:20 22 quote where it is. I have not seen anything like that
06:01:23 23 before. So we removed it, and they've included it. We'd
06:01:27 24 ask that it be removed.

06:01:28 25 THE COURT: So what happened, I think, is it was

06:01:33 1 originally in the ASUS version, and you all removed it, and
06:01:33 2 it didn't end up on our copy.

06:01:33 3 MR. BENNETT: Okay.

06:01:38 4 THE COURT: So I haven't seen that.

06:01:38 5 MR. BENNETT: Okay. Well, then it -- it was -- we
06:01:39 6 submitted completing forms, and I wasn't sure which form
06:01:41 7 Your Honor was looking at.

06:01:41 8 THE COURT: If it was not a term that was
06:01:43 9 construed, it'll not be on the chart.

06:01:46 10 MR. BENNETT: Thank you, Your Honor.

06:01:47 11 THE COURT: With respect to the verdict form --
06:01:49 12 let me just make some -- I tell you, to be honest, let
06:01:51 13 me -- I think probably the easier thing to do is let me
06:01:55 14 tell you what my general views are, and then you can tell
06:02:00 15 me why you think they're wrong, and I'll consider what you
06:02:05 16 have to say. And if I change my mind, I'll go with you.
06:02:11 17 Otherwise, we'll leave it the way it is, and you can put
06:02:11 18 your objections on the record.

06:02:13 19 I think that the appropriate question on
06:02:18 20 infringement is a one-part question instead of a two-part
06:02:27 21 question. My concern with two questions, Mr. Joshi --
06:02:32 22 Joshi is that it invites the jury to make a mistake later
06:02:35 23 on. I certainly think that you all are -- you can argue in
06:02:40 24 closing, you know, what you think the appropriate damages
06:02:44 25 are. If you think that only, you know, 6-axis infringes as

06:02:50 1 opposed to 3 or as opposed to both of them, it's certainly
06:02:54 2 an argument you can make, but I don't think that justifies
06:02:58 3 a -- I don't think it justifies both -- both questions,
06:03:03 4 because my concern is if you end up with, you know, a
06:03:07 5 damages number and then it turned out you get a "no" on one
06:03:11 6 and a "yes" on the other, it's going to be difficult to
06:03:16 7 unwind it. And so that is my inclination.

06:03:23 8 On the -- on Question 1, infringement versus
06:03:27 9 induced infringement, I think that limiting the question to
06:03:31 10 inducement essentially -- or effectively amounts to a JMOL
06:03:36 11 of noninfringement on direct infringement. And, you know,
06:03:40 12 the -- I mean, you certainly can make, you know, a Rule 50
06:03:45 13 motion on that, of course, and I'll take it up, and you can
06:03:48 14 make another Rule 50 after trial if that becomes necessary.

06:03:54 15 But I think -- I think the post-trial is probably,
06:04:00 16 you know, the better way to handle that. And I'm -- at
06:04:07 17 this point, I think the safer approach is to use language
06:04:10 18 reflecting infringement.

06:04:12 19 On damages there is some language there that is
06:04:21 20 sort of redundant about the jury can only award damages if
06:04:25 21 there's an infringement and validity, and that's in there
06:04:30 22 twice. So we're going to take that out one of those
06:04:33 23 places.

06:04:34 24 And then, finally, on the lump sum question,
06:04:38 25 there's some language in the verdict form that was provided

06:04:44 1 by the Plaintiff limiting damages to a lump sum, and
06:04:50 2 there's some objection about the Defendant about that.

06:04:55 3 Can you help me understand exactly where the
06:04:59 4 conflict is there?

06:05:01 5 MR. OLIVER: May I respond, Your Honor?

06:05:10 6 THE COURT: Of course, yes.

06:05:11 7 MR. OLIVER: Yes. So we've already had a motion
06:05:14 8 about this attempting to limit Lone Star's expert
06:05:18 9 testimony, but prior to trial, both parties came with a
06:05:24 10 verdict form that said damages should be assessed up to the
06:05:28 11 time of trial.

06:05:29 12 We entered trial with that understanding. Lone
06:05:31 13 Star then was permitted to present evidence through the end
06:05:40 14 of the term of the patent. And the issue there is the
06:05:44 15 verdict form needs to reflect that that's what the jury has
06:05:46 16 been asked to render because, otherwise, the jury has a
06:05:48 17 damages number that goes through 2022. If they only -- if
06:05:51 18 it's awarded through trial, it's based on that larger
06:05:55 19 number, and then Lone Star could potentially come and ask
06:05:57 20 for a running royalty after trial when they've already
06:06:02 21 infected the jury with evidence through the end of the
06:06:06 22 patent.

06:06:06 23 So the form needs to reflect the evidence that was
06:06:09 24 presented and what Lone Star asked the jury to award. So
06:06:13 25 it needs to be through the end the term of the patent.

06:06:16 1 THE COURT: Mr. Bennett?

06:06:17 2 MR. BENNETT: I'm just going to go back to the
06:06:19 3 pretrial order again where we put in our contentions that
06:06:23 4 two parts of the lump sum payment. We may not have used
06:06:30 5 those words exactly, "lump sum," but it was -- the reason
06:06:34 6 we didn't do that is because we were just trying to parrot
06:06:38 7 what our expert would say at trial, which is what he did
06:06:42 8 say. I don't know why they're trying to feign surprise
06:06:42 9 here.

06:06:44 10 I will pull a, on the record, mea culpa for
06:06:46 11 letting the draft verdict form go out with the wrong
06:06:52 12 wording. That was my fault. But it doesn't change what
06:06:55 13 the operative pleadings say and what the evidence in the
06:07:00 14 case is.

06:07:01 15 THE COURT: Okay. All right. Thank you for those
06:07:03 16 comments.

06:07:03 17 With respect to the verdict form, were there any
06:07:06 18 other comments that either side had --

06:07:12 19 MR. JOSHI: Yes, Your Honor.

06:07:13 20 THE COURT: -- other than the lump sum issue?

06:07:15 21 MR. JOSHI: If I may, Your Honor?

06:07:18 22 THE COURT: Yes.

06:07:18 23 MR. JOSHI: We believe it's essential for their
06:07:22 24 two -- two products -- two -- you know, the two
06:07:23 25 representative products that their expert started with, the

06:07:27 1 P11 and the P12. One is 3-axis, and one is 6-axis.

06:07:30 2 And those are very different products. They
06:07:32 3 operate differently. We've been talking about the
06:07:35 4 differences between them. The infringement arguments are
06:07:38 5 different. The noninfringement arguments are different.
06:07:42 6 And, you know, so, in fact, there's no agreement between
06:07:44 7 parties as to representative products at all in this case.
06:07:48 8 Typically, that agreement is made well in advance.

06:07:50 9 That being said, there are two. There are two
06:07:53 10 now. There's a 3-axis and a 6-axis, and the jury has been
06:07:58 11 hearing those terms, and they know that they're different,
06:08:00 12 and we've been stressing the differences between them
06:08:03 13 throughout this trial.

06:08:04 14 And so the products fall into two categories, and
06:08:07 15 it's very possible that they'll find one to be infringing
06:08:10 16 and one not to be infringing.

06:08:12 17 And we don't believe that simply telling them just
06:08:15 18 take care of in the damages is adequate. We believe that
06:08:19 19 the form is not that complicated. There's just one patent.

06:08:23 20 And, you know, even with -- even with dividing --
06:08:25 21 even dividing the products into two categories, there's
06:08:28 22 still just five questions. So we don't think this
06:08:30 23 complicates the issue. It will bring clarity to them
06:08:33 24 because it will be more recognizable for them to see a form
06:08:37 25 with terms that they've been listening to.

06:08:39 1 THE COURT: Mr. Bennett, any comments you wish to
06:08:42 2 make?

06:08:43 3 MR. BENNETT: There have been far more complex
06:08:45 4 cases come through this court with more products and more
06:08:48 5 patents and more claims with exactly almost the same form.

06:08:54 6 This is a one-patent case. It's one kind of
06:08:57 7 product. It's a monitor that, yes, it infringes in
06:09:03 8 different ways according to us, but it -- for the reasons
06:09:08 9 Your Honor has already said, it doesn't justify
06:09:11 10 differentiation either on the damages or on the
06:09:12 11 infringement question.

06:09:13 12 Let's give the jury a simple form. They can apply
06:09:16 13 the evidence. If there is something to clean up, we can do
06:09:19 14 it post verdict.

06:09:20 15 THE COURT: Mr. Joshi, if I were to submit a
06:09:23 16 verdict form to the jury that has both questions, would you
06:09:27 17 agree that the products are represented?

06:09:31 18 MR. JOSHI: I think we have to at this point, yes.

06:09:35 19 THE COURT: Mr. Bennett?

06:09:39 20 MR. BENNETT: If it's a question of infringement,
06:09:42 21 perhaps. I guess the problem for us is because we've
06:09:46 22 treated them as representative products, although we did
06:09:49 23 get into evidence today through Mr. Perdue the formula he
06:09:52 24 used, and I could easily back into the math, we've only
06:09:56 25 presented the question as a one-time lump sum 2.8 million

06:10:01 1 over all products.

06:10:06 2 Although the evidence is there, I'd rather not
06:10:13 3 spend the night trying to back into that math. That's
06:10:16 4 not the way it's been presented to the jury. It would
06:10:19 5 effectively -- effectively be, and I'm sure they would
06:10:22 6 argue a sort of summary judgment motion through a verdict
06:10:26 7 form, and I don't think that's appropriate.

06:10:27 8 THE COURT: Mr. Joshi, I'm going to think about
06:10:30 9 it.

06:10:30 10 MR. JOSHI: Okay. I'll just make one comment, not
06:10:32 11 to belabor the point.

06:10:33 12 THE COURT: Sure, sir.

06:10:34 13 MR. JOSHI: This representation, it started with
06:10:36 14 Dr. Ducharme, their expert. His expert report began
06:10:40 15 with 3-axis and 6-axis. He actually coined those terms.
06:10:43 16 So they can't -- they can't say they're surprised by it on
06:10:49 17 the damages side.

06:10:50 18 THE COURT: Okay.

06:10:53 19 MR. BENNETT: One housekeeping -- I think we're
06:10:56 20 done with the charge, at least for our part.

06:10:58 21 THE COURT: And as far as I'm concerned, we are.
06:11:01 22 Anything anybody else wishes to say about either
06:11:03 23 the charge or the verdict form?

06:11:05 24 MR. BENNETT: As far as the charge goes, just for
06:11:07 25 preservation purposes, we objective to an invalidity

06:11:11 1 question going to the jury, at least on the grounds that we
06:11:14 2 challenged in our Rule 50. We don't think there's
06:11:17 3 sufficient evidence as part of that. But that -- we'll
06:11:19 4 just get that on the record.

06:11:20 5 I have a housekeeping item. We're technically
06:11:25 6 supposed to exchange the demonstratives in about 20 minutes
06:11:30 7 or closing slides.

06:11:32 8 THE COURT: Sure. Whatever -- whatever y'all can
06:11:34 9 agree on that, that's fine.

06:11:34 10 MR. BENNETT: Okay. Thank you.

06:11:36 11 THE COURT: Let's do something that everybody's
06:11:36 12 happy with because I don't want to make the jury wait while
06:11:40 13 we argue for 30 minutes about a slide that's just been
06:11:41 14 disclosed, all right?

06:11:42 15 So y'all get your slides disclosed. I don't
06:11:46 16 remember what y'all's management procedure stipulates about
06:11:50 17 that, but whatever it is, y'all follow it to the -- to
06:11:52 18 the T and get it produced, and if there are objections,
06:11:55 19 y'all try to resolve those.

06:11:59 20 MR. BENNETT: Understood. Thank you.

06:12:00 21 MR. JOSHI: So just one housekeeping, Your Honor.
06:12:02 22 Since you're inclined to deny our JMOLs anyway and we're
06:12:08 23 filing them for the record, could we push the deadline from
06:12:12 24 10:00 p.m. to 11:00 p.m.? Would that be okay?

06:12:15 25 MR. BENNETT: I have no objection.

06:12:15 1 THE COURT: That's fine. That'd be fine.

06:12:17 2 MR. BENNETT: As long I can get until 7:00 a.m. on
06:12:19 3 my --

06:12:19 4 THE COURT: You have until 7:00.

06:12:19 5 MR. BENNETT: Thank you, Your Honor.

06:12:22 6 THE COURT: Right. Right. Okay. Good. All
06:12:24 7 right. So that's fine.

06:12:25 8 You all get that filed by 11:00 and a response by
06:12:34 9 7:00, and that will solve that.

06:12:35 10 We will make some final decisions about the
06:12:38 11 verdict form and the instructions either this evening or
06:12:43 12 very early in the morning, and as soon as we have made
06:12:48 13 those decisions, we will circulate to you by email.

06:12:53 14 The verdict form we've settled on have the
06:12:58 15 instructions in it, and I'll give you an opportunity to put
06:13:00 16 any objections on the record either before or after we
06:13:03 17 instruct, as long as the parties agree that neither side is
06:13:09 18 waiving any arguments by putting the objections to the
06:13:13 19 charge and the verdict form on the record after the jury
06:13:20 20 has begun its deliberations. That's my preference so that
06:13:24 21 we don't keep the jury waiting.

06:13:27 22 Any -- any -- either side have a problem with
06:13:29 23 that?

06:13:29 24 MR. BENNETT: Plaintiff agrees.

06:13:31 25 MR. JOSHI: Fine with the Defendant.

06:13:32 1 THE COURT: Good. Okay.

06:13:35 2 What else? We've got 30 minutes a side for
06:13:38 3 closings.

06:13:45 4 Mr. Bennett, I don't know if you're doing all of
06:13:48 5 the closing or if you're splitting it, and you don't need
06:13:50 6 to tell me. You're welcome to split it between other
06:13:53 7 members of your team.

06:13:54 8 I would ask that you use 20 minutes of your
06:13:57 9 30 minutes in your opening section. Anything of your 20
06:14:02 10 that you don't use, you're going to lose that because I'm
06:14:09 11 only going to let you use 10 when you get back up.

06:14:12 12 MR. BENNETT: That's exactly the split I was going
06:14:15 13 to ask you.

06:14:16 14 THE COURT: Good. And I'll give either side
06:14:18 15 whatever warnings you want at the end of your first 20 or
06:14:20 16 whatever.

06:14:20 17 MR. BENNETT: If I use the lapel mic, can I -- I'm
06:14:24 18 a pacer by nature, and I will keep my distance from the
06:14:29 19 jury, but --

06:14:29 20 THE COURT: Yes, I'm going to let you. I'm going
06:14:31 21 to break the promise I made myself about two weeks ago.
06:14:34 22 I'm going to let you move around a little bit.

06:14:36 23 MR. BENNETT: Thank you, Your Honor.

06:14:37 24 THE COURT: We'll make sure all of the lapel mics
06:14:41 25 get back into the charger, so that we can have a full set

06:14:44 1 for in the morning.

06:14:45 2 And, yes, as long as you have the lapel mic.

06:14:49 3 Mr. Joshi, your lapel mic needs to be on your
06:14:53 4 lapel, not in your pocket.

06:14:56 5 MR. JOSHI: My pocket --

06:14:56 6 THE COURT: That's -- yeah, your --

06:14:56 7 MR. JOSHI: It falls off. It's very sturdy in
06:14:58 8 there.

06:14:59 9 THE COURT: Get it up here.

06:15:00 10 MR. JOSHI: Okay.

06:15:01 11 THE COURT: What else? Anything?

06:15:02 12 MR. JOSHI: Just finally, Your Honor, just a minor
06:15:04 13 thing. I'm positive I moved DX-3 and DX-9 into evidence.
06:15:08 14 If I failed to do that, I would like to move it in now.

06:15:13 15 THE COURT: Mrs. Schroeder is nodding her head
06:15:16 16 that you did.

06:15:16 17 MR. JOSHI: Thank you.

06:15:18 18 THE COURT: Are y'all -- is the Plaintiff's
06:15:19 19 exhibit -- exhibits all taken care of to your knowledge?

06:15:21 20 MR. BENNETT: I'll have to check with the people
06:15:24 21 who keep me in line, Your Honor, but I'm pretty sure that
06:15:26 22 that's the case.

06:15:27 23 THE COURT: All right. Thank you all. See you in
06:15:29 24 the morning.

06:15:31 25 COURT SECURITY OFFICER: All rise.

06:15:32

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(Time noted 6:15 p.m.)

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COURT REPORTER'S CERTIFICATION

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of my ability.

/s KATHRYN McALPINE/
KATHRYN McALPINE, RPR, CSR, CCR